ECONOMICS IN PRACTICE

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ECONOMICS IN PRACTICE

SIX LECTURES ON CURRENT ISSUES

BY

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PREFACE

A FEW months ago the University of London invited me to give a course of four lectures at the London School of Economics. They were so good as to acquiesce in my stipulation that the lectures should not be of an abstruse character, but on matters of general interest and more or less popular in tone. They further expressed a desire, though they did not put it in bond, that the lectures after delivery should be published. About that I have felt considerable hesitation. The spoken word, even the word that is written to be read aloud, may well be too frail to face the austerities of print. However, rightly or wrongly, I have in the end decided on publication; and I have included along with the four London lectures—themselves given, for a first time of asking, to a similar audience in Cambridge—two others, numbered III and V, which accompanied them here but did not visit London. The lectures are printed substantially as they were delivered. I have even left intact, not without qualms, a number of ribald remarks

about politicians. I trust that these will be accepted in good part. Should any of the great and wise, whose names are taken in vain, feel themselves offended, I hereby crave their pardon. The pen is dignified and discreet, but the tongue is an unruly member.

A. C. P.

KING'S COLLEGE,
CAMBRIDGE

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I

AN ECONOMIST'S *APOLOGIA*

By the kind invitation of the University of London I am to deliver here some lectures, not of a specialist character, designed to have interest for the general body of undergraduate students of economics. This afternoon in the first of them I shall attempt a broad general account of what it is that an economist has to do—something that one might call, if one wished, an economist's *Apologia*.

In some ways I am very ill-qualified for a discourse on these lines. The best apologist for anything is the man to whom there is nothing like leather, to whom his own special line of study presents itself as infinitely the most important thing in the world. I am not such an one as that. I cannot pretend to regard the pursuit of economic knowledge as the most important activity in the world. I cannot even pretend to regard the pursuit of any kind of knowledge in that light.

> Knowledge, we are not foes,
> I seek thee diligently;
> But the world with a great wind blows,
> Shining and not from thee.

The pursuit of knowledge is one worthy form of activity. But it is not the only worthy form; it is not, I think, the first.

Nor is this the worst of my confession. Within the limited field of knowledge and of inquiry the part assigned to the economist is not, as I esteem it, a very high one. When I was a boy it was still the fashion where I was brought up to draw a sharp division between the professions and business: and to regard anyone who was engaged in trade, or even whose father or grandfather had been so engaged, as a type of being essentially inferior to oneself. That curious attitude of mind has now for the most part disappeared: though there still survive of it certain priests, and, more numerously, certain priestesses. That vanished or vanishing sentiment may serve to illustrate my present point. Economics is a tradesman among the sciences. It has little romantic appeal. It does not shatter atoms or weigh stars: it does not beat despairing wings in the tenuous air of high philosophy. It is drab: it is plebeian. It has not freedom either of the sky or of the seas. It is tied and chained with sordid thongs to earth. What, then, is the claim that it can make? What is the prize that it offers to its followers?

In the introduction to his book on *Muscular Movement in Man* Professor A. V. Hill relates

that, after he had delivered in Philadelphia a lecture entitled "The Mechanism of the Muscle", he was challenged by an elderly and indignant auditor to explain of what use his difficult investigations in the science of physiology were supposed to be. His reply was, "To tell you the truth, we don't do it because it is useful, but because it is amusing". His audience applauded loudly, and the newspapers next day came out with approving headlines, "Scientist does it because it is amusing". Now for students of some branches of science that is an admirable and sufficient answer. These scientists desire to know for the sake of knowing. They do not and need not offer any extraneous justification for their pursuit:

> We are the pilgrims, master; we shall go
> Always a little further; it may be
> Beyond that last blue mountain, barred with snow,
> Across that angry or that glimmering sea.

But can an economist properly take this line? In some measure no doubt yes. To understand the complex interworkings of the economic world, in its endless pursuit of equilibria that are never attained, is an intellectual challenge. In those systems of equations, in which Walras and Pareto endeavour to group the interrelated parts into a unified whole, there is an

aesthetic appeal. But we must not, I think, lean more than lightly upon that. Our subject matter does not lend itself to triumphs of pure reasoning. On that side our problems are *too easy*. To newspaper reviewers, indeed, the analyses, which it is sometimes convenient to tackle by what Marshall has called a little potted calculus, seem of a terrifying difficulty. To their stunted vision we inhabit a region unattainable to common men: we "walk with death and morning on the silent hills". But to the student of theoretical physics or the pure mathematician, watching from their Everest, the severest of so-called mathematical economists are merely flies crawling upwards to the towering summit of Primrose hill! Looked at as knowledge for its own sake, the showing that economics makes is a poor one.

But it is not only as seeking knowledge for its own sake that sciences justify themselves. For many of them there is also, if they choose to use it, a second line of apology. The knowledge that they achieve often, and sometimes in very surprising and unexpected ways, leads to what politicians and merchant princes call "practically useful results". The researches of men such as Professor A. V. Hill, however little direct utilitarian motive they may have, have large utilitarian consequences. The relevance

of physiology to the practice of medicine is too obvious for more than mention. But in other fields investigations at first sight almost blatantly useless have proved parents of future practice. I say nothing of the fame that has come to chemistry as a purveyor of poison gas and high explosive shells. Many less dubious benefits the world owes to pure science. The primal source of wireless telegraphy was not the experimental work of Marconi, but the fundamental equations—*prima facie* wholly without practical relevance—that were developed by Clerk Maxwell. It is on this aspect of his work, on its promise of fruit rather than on its promise of light, that the economist must, in the main, build his *Apologia*.

But here it is proper to pause for a word of caution against possible false inferences. If it be granted that the justification of economic study is to be found chiefly in practical usefulness, this does not imply that economists should confine themselves to immediate practical problems. There is indeed—particularly in such a period as this, when the whole world is economically out of adjustment, when crops that in one land might feed the starving in another are burnt to reduce a glut, when in our own country still over two million persons are seeking work and unable to find it—there is indeed on all of us

a strong inducement to concentrate our thoughts on economic pathology. But pathology must be built on physiology. It would in the long run be an ill-service to medicine to neglect it. The fruit grower does not merely tend the fruit itself: he looks also to the roots of his trees. The experience of the natural sciences affords abundant proof that it is not always the study of immediate practical problems that helps practice most. Remoter, more fundamental, so to speak more theoretical, investigations sometimes in the end yield the largest harvests. The studies of Clerk Maxwell, that I have just named, are an eminent example of that. An economist whose work lies in a region apparently remote, so long as it is real and serious, and not a mere building of cheap toys, is no less entitled than one who stands closer to the detail of actual life, to regard himself as a potential gardener of fruit.

Before we look more closely at what this fruit is, there is one further preliminary remark to make. Certain special characteristics of the economist's subject matter impose on him considerable embarrassment. The first and most important of these may be set out in this way. It is possible to divide subjects of study into two broad classes according as the apparatus of thought employed in them consists mainly of

private machinery or of public machinery. In such a subject as literary criticism the machinery is private—the trained taste and sensitive perception of the individual critic. In theoretical physics, on the other hand, there is an elaborate public apparatus of mathematical technique. In a subject of study where public machinery of a complex character is employed serious students are free to carry on their work without instruction from well-meaning persons who have had no training in it. For theoretical physics in particular the horrific form of the calculus of tensors stands guardian at the gate. Not the most self-confident politician, not Mr. Winston Churchill himself, ventures to push past that dragon! Sciences in which the public machinery of thought plays a smaller part, or in which its aspect is less formidable, are not so fortunate. Biologists are still sometimes informed by instructors in the Press that if a cow about to calve is placed in red surroundings, the calf when it is born will be red. But the public apparatus employed in economics makes even less showing than that employed in biology. Moreover—and this is a curious point—when an economist does make use of a formal technique, even of something as innocent as elementary differential calculus, the man in the street, instead of being moved to respect as he is

when the physicist employs a formula he cannot understand, forthwith asserts that the economist is intentionally and viciously obscure. It is his right, he apparently believes, that every book written upon our subject shall be intelligible to him without any need for effort, as he reclines in his post-prandial arm-chair. As a consequence of this state of things economists are confronted, not merely with the task of seeking true solutions of their problem, but also sometimes with the further task of clearing out of the way large masses of rubbish. They are like mountaineers on a steep hillside, who have to face, besides the natural difficulties of the ascent, showers of stones discharged upon them at frequent intervals by accompanying herds, may I say, of goats!

A second special characteristic of the economist's subject—one indeed that is in large part responsible for the situation I have been describing—is that economic argument is coming continually to play a larger and larger part in partisan political debate. Political partisans —I use the term advisedly so that everyone can easily withdraw his personal favourite from the slanders I am about to utter—political partisans, I say, are accustomed to decide what they want to do first and to seek for arguments in favour of it afterwards. Economic reasoning

is for them, not a means of arriving at the truth, but a kind of brickbat useful on occasions for inflicting injury on their opponents. There is a tale of a Chancellor of the Exchequer who elected to impose a certain duty in one year and in the year following elected to remove it. He invited his officials to provide him with arguments in favour of that second course of action. They were obliged to inform him that in his speeches of the year before, in favour of the policy he was now reversing, they had already embodied antidotes to all the arguments he now required. This attitude of political partisans towards economic reasoning puts economists in continual danger—one to which theoretical physicists are correspondingly exposed at the hands of theological partisans—the danger of attempts at exploitation. I myself on one occasion had an amusing experience of this kind. On a piece of proposed legislation that involved a point of economic analysis I had rashly written something in *The Times*. The Prime Minister of the day, having been informed, I have no doubt by his secretary, that my argument was favourable to his policy, delivered a public speech, in which the pronouncement of "the great Cambridge economist" was held up to all men's admiration. As it happened, the opinion of the Prime Minister's secretary that my argument

B

supported his policy was incorrect, and it became my painful duty to point this out. Thereupon in this eminent man's next public utterance "the great Cambridge economist" disappeared and there emerged in his stead that "mere academic theorist!" Of course to students of detached mind this kind of thing is entertaining and quite harmless. But to a young man the ambition to play a part in great affairs is natural: and the temptation to make slight adjustments in his economic view, so that it shall conform to the policy of one political party or another, may be severe. As a conservative economist or a liberal economist or a labour economist he has much more chance of standing near the centre of action than he has as an economist without adjectives. But for the student to yield to that temptation is an intellectual crime. It is to sell his birthright in the household of truth for a mess of political pottage. He should rather write up for himself and bear always in mind Marshall's weighty words: "Students of social science must fear popular approval; evil is with them when all men speak well of them. If there is any set of opinions by the advocacy of which a newspaper can increase its sales, then the student . . . is bound to dwell on the limitations and defects and errors, if any, in that set of opinions; and never to advocate them uncon-

ditionally even in an *ad hoc* discussion. It is almost impossible for a student to be a true patriot and to have the reputation of being one at the same time."

There is a third characteristic of the economist's work. His subject matter in the last resort is economic life in its full concreteness, a moving, breathing process among actual men and women in their factories and their homes. But the great majority of economists are, from the very nature of their occupation, more or less cloistered persons. Their contact with the thing they study is, in the main, not direct, but through the printed page. They therefore lack that intimacy of touch, that feel of reality, which is vital to full understanding. There are elements in front-line warfare that a staff officer working in the rear can never completely grasp. In the picture that he draws there will inevitably be a certain hardness and woodenness of outline. That this is a very important thing was brought home to me, not in the course of economic work at all, but through reading a book by an American writer about mountaineering. Anyone who has had any personal experience of that craft would see at once that the work is a compilation, a manufactured product built up entirely out of books. It was not merely that the writer made mistakes of fact—asserted that the Matterhorn

was 1000 feet higher than it actually is—and so on. But the whole feel was wrong. Had every statement in the book been absolutely correct, it would still have been evident that the writer's personal experience of serious mountaineering was nil. For the mountaineer, therefore, the book had no appeal at all—except, perhaps, in places, the appeal of unintended comedy. Now the academic economist discussing economic life often suffers from the same handicap as the writer of that book. He cannot write realistically because he lacks the necessary personal experience: and, if he does not attempt to write realistically, but confines himself to analyses of a general character, from which detail is excluded, his task is only half accomplished. Therefore—I am giving now advice that I myself have notoriously failed to follow—it is up to the economist, when he is young and his mind is plastic, to take whatever opportunities he can find for direct acquaintance with the life of men and women in factory and field; to understand machinery; to see for himself at first hand how businesses are organised and run. Marshall in his youth had what he called his Wanderjahr. He told me once that, had he been planted in a desert island, he thought he could have re-designed the great majority of important machines currently in use—other than electrical machines. He used to go round

factories and study the work that was being done until he could guess within a few shillings the rate of wages that the men he saw were earning. That way,—and if you will reread, as I have lately done, the earlier chapters of *The Wealth of Nations*, you will see that it is pre-eminently the way of Adam Smith—that way, and not by sitting in our studies, as some of us have done, is how the really great economist prepares himself for his work.

I now turn to consider more directly the kind of fruit that economists look to garner. In his recent presidential address to The Royal Economic Association Professor Edwin Cannan—whose writing I learned first to admire as an undergraduate and have admired ever since—spoke of the need, as he conceived it, for a simpler economics. In a world in chaos, where blundering legislation strangles trade, where governments, misconceiving what progress means, cancel the benefit of technical advance by subsidies and quotas, a leading task of the economist is not so much to seek new knowledge as to drive home everywhere and on all possible occasions broad and elementary economic truths, which, commonplaces as they are to students, those set in authority over us perpetually disregard. "I appeal especially", Professor Cannan concludes, "to the younger teachers to consider

what sort of future they can look forward to if the popular English newspapers continue to get their readers to believe that at one and the same time the pound sterling may be worth 20 twentieths of itself in London and Lisbon, 31 twentieths in Madrid, and only 14 twentieths in Paris. Do not let them simply hold their noses and close their eyes from the disgusting mess, and run back to find peace and contentment in neat equations and elegant algebra." It is easy to reinforce this plea by making excerpts from the speeches of public men. A short while ago, for example, it was argued against the Minister of Agriculture that to exclude imports of bacon by quota affected the consumers in precisely the same way as to exclude them by a tariff, but that, whereas under a tariff the extra sums paid by them go to the Treasury, under a quota they go into the pocket of foreign producers or importing houses. It would have been easy for the Minister, in reply, to admit this obvious truth and then to argue that, nevertheless, the quota plan was on the whole more satisfactory, because a quota is a more flexible instrument than a tariff, more readily adjustable to quickly changing conditions. But he was not content with this. He asserted that it was actually of advantage to this country to pay high prices for foreign bacon because in that case foreigners

were enabled to buy British goods! Can you imagine anything more fantastic? It is truly not to my advantage to have my pocket picked, in spite of the fact that the thief, thus enriched, is able to buy more copies than he would otherwise have done of *The Theory of Unemployment* and *The Economics of Welfare*! Here is another excerpt, this time a more distinguished one, because it derives from a Prime Minister. The speaker was anxious to impose duties upon imports. He discovered from his studies in statistics that in times of prosperity prices are generally high. Now duties on imports would make prices high. Therefore duties on imports would promote prosperity! At the time of this utterance I was young and impatient, and it gave me a pleasant feeling down the spine to make eminent men look foolish. To that end I constructed a logical parallel to this argument. Statistical research reveals that in the great majority of cases, when a salt-cellar is present on a table, a pepper-pot is there also. It follows, by a process of reasoning precisely analogous to that of this Prime Minister, that, if I now extract from my pocket a salt-cellar and place it on the table, there will be heard a buzzing in the air, and a pepper-pot will alight before me faithful to its inseparable companion.

But it is not only fallacies gross and palpable

as these whose existence shows the urgency for spreading economic knowledge. If it were, serious students might well reply that to lecture on the alphabet is work for nursemaids, not for them. Besides these absurdities there are also, permeating popular thought and influencing public action, innumerable fallacies of a more subtle kind, half-baked thoughts, the more insidious because they are partly true, muddles, confusions, misunderstandings, into which even highly intelligent persons, who have not been trained in our special discipline, are liable to fall. The traps that most often claim victims are, I think, those baited with statistics. As this is a place of education let us do honour to the Minister of Education. On July 18 last Lord Halifax, in the House of Lords, was replying to the suggestion that, if house-building were stimulated to great expansion, the manufacturers of building materials might put up their prices unduly. According to the report in *The Times* the Minister of Education said: "Experience did not always show that a great development of building had the effect of putting up costs (*cheers*). . . . In March 1924 the total number of houses built was 86,000, whereas in March 1934 the total number was 266,000, or more than three times the number. Yet the prices of materials were generally con-

siderably higher in 1924 than in 1934. Those figures showed that an increased volume of house-building did not necessarily carry with it soaring prices, as some people have feared." Now that, you will agree, is a very remarkable argument. Every statement in it is literally correct; the Minister's secretary did not let him down. But that *after* something has happened a price will not *necessarily* be higher than it was before is a proposition too obvious to state. What the Minister intended to suggest—if he intended anything—can only have been that the price of materials would not necessarily be higher if building was expanded than it would be if *other things remained the same* and building was not expanded. To establish this he observes that the price of materials in 1934 was not higher than in 1924, without noticing that the general level of wholesale prices, as calculated by the Board of Trade, was less than two-thirds of what it had been ten years earlier. I do not for a moment suggest that the Minister, or even his secretary, deliberately suppressed this fact. It simply did not occur to them that the general price situation was relevant to their argument. And yet elementary statistical method is a branch—a humble one, no doubt, but still a branch—of the great tree of Education, on which the Minister sits! Here is a second

illustration, the more pertinent to my argument because the person unwittingly entrapped is a man of great public spirit and high intelligence. In his recent book on the Anti-slum Campaign Sir Ernest Simon was concerned to show—what is no doubt entirely true—that the decreasing size of the normal family makes it imperative that the number of habitable houses shall be increased more than in proportion to the population. To prove this he prints tables giving side by side for a series of cities, as between the censuses of 1921 and 1931, the number of separate houses and the number of families as recorded in the census. The tables profess to show that the new house-building undertaken and carried out since 1921 has been almost entirely offset by the growth in the number of families, so that the housing shortage, which existed at the end of the War, has hardly been reduced at all. Now anybody who looks at these tables with the eye of a statistician cannot help seeing that there is something fishy about this: the correspondence between the number of new houses built and the increase in the number of families is altogether too close. He will automatically suspect a trap. And there is a trap. A family for census purposes—a census family—is not a family in the ordinary sense: it is "a group of persons in

separate occupation of any premises or part of premises". It follows from this definition that the building of each one new house, provided that it is occupied, implies *by definition* the creation of one additional census family. No wonder then that the number of houses built and the increase of census families have everywhere corresponded closely to one another! It is obviously impossible, from this correspondence, to derive *any* conclusion about the relation between the amount of house-building that has taken place and the addition that has been made to the number of natural families—families as we ordinarily understand the term. Here is one more example—a fallacy manufactured in my own workshop for the occasion—which, I regret to say, has not yet, so far as I know, been perpetrated by any public man. The census figures for England and Wales for 1921 record the existence of 7,450,000 husbands not widowed or divorced, and 7,590,000 wives not widowed or divorced; an excess, that is, of 140,000 in the number of wives over the number of husbands. Only one conclusion is possible. At that time there must have been in this country no less than 140,000 husbands with two wives each; or, incredible and revolting monster, one husband with no less than 140,001 wives! By the census of 1931, owing, no doubt,

to the brutal treatment they received, 26,000 of the monster's wives had disappeared from his harem! I leave it to you to resolve these mysteries; or, in the alternative, to prepare forthwith a forcible petition for presentation to their twin Graces, the Archbishops of Canterbury and York. I could, of course, continue with illustrations of this kind for an indefinite period; but it is not necessary. Nobody will deny that a wider spreading of such economic knowledge as already exists and of trained critical thinking on economic matters is an urgent public need; and that, so far as economists can promote this, they will be providing in their day and generation fruit of real value.

But are we to confine ourselves to this? Are we to be merely educators—propagators of results and methods that are already well known to ourselves? I confess that to my mind that activity is a small and secondary part of the task proper at all events to academic economists. The statutes of my College include in its purposes, along with education, research. It is right and proper that the University should train and send out into the world persons qualified, so to speak, as economic practitioners; just as our medical schools send out men qualified as doctors. It is the business of these men to

apply in the conduct of affairs the scientific knowledge they have acquired here. But behind the practitioners of things already known there must stand research workers, whose task it is, so far as they are able, to add to what is known. The medical profession rests on the support and the pioneering work of physiologists and biochemists, whose proper home is the University. Even so, to my mind, there is a place for economists of the chair, whose primary task is the advancement, not the retailing of knowledge.

Of this work anybody who compares the state of economics as a science with the state, say, of physics or of chemistry, will not doubt the urgent need. Our science is still an infant science. Despite the improvements that have been made in statistical methods and the increase in statistical data, its analyses are still, in the main, as Marshall observed nearly fifty years ago, qualitative, not quantitative, analyses. Of the general character of long-run tendencies we have perhaps, subject to this limitation, a fair understanding. But of the processes of change, the passage from one equilibrium situation towards another, the order of events during such passage, the conditions under which movement is cumulative, and, so to speak, self-propagating, we know extremely little. What is sometimes

conveniently called short-period economics is a field as yet so lightly tilled that the cultivation of it may well be found to yield increasing returns. There are broad issues of general analysis; there is the task of clothing the dry bones of theory with an appropriate covering of statistical fact; there are more detailed problems special to particular industries or particular places. There is, indeed, an enormous mass of work for economists of the chair to do.

Those who are endeavouring to move forward through this maze need no counsel from me. Yet there is one plea I should like to make—for catholicity and tolerance. Controversy up to a point serves, no doubt, to stimulate and clarify thought. But controversy for its own sake is a prodigious waste of time. More particularly, controversy about lines of approach—the historical approach *versus* the mathematical approach, and so on—should long ago have been relegated to the scrap heap. Divergent methods are partners not rivals:

> There are nine-and-sixty ways of constructing tribal lays,
> And every single one of them is right!

It is not politic for us to lay down even the most general rules for one another: we may so soon be constrained to break those rules ourselves. Not so long ago one of my most distin-

guished colleagues urged his fellow-economists to "eschew the Treatise, pluck the day, fling pamphlets into the wind". A few years later he himself offered, and we gratefully received, a work with the title of Treatise and comprising two weighty tomes! Still less, I suggest, is it politic to persuade ourselves of our own intelligence by decrying the work of others. Marshall has been criticised for his extreme loyalty to the great classical writers; for interpreting their thought perhaps over-generously; for looking always to the positive contributions that they made, and passing by their failures or imperfections. If generosity of that kind be a fault at all, it is a great man's fault, not a little man's. Improve on what has been done by all means; build on it; strengthen and test its foundations. But do not cavil and depreciate. I do not, of course, suggest that economists should adopt that convention which, among doctors, forbids any adverse criticism of a brother practitioner. But such adverse criticism might well occupy a much smaller place in our discussions and in our interest than it in fact does occupy.

And there is yet another thing. Are we, in our secret hearts, wholly satisfied with the manner, or manners, in which some of our controversies are carried on? A year or two ago,

after the publication of an important book, there appeared an elaborate and careful critique of a number of particular passages in it. The author's answer was, not to rebut the criticisms, but to attack with violence another book, which the critic had himself written several years before! Body-line bowling! The method of the duello! That kind of thing is surely a mistake. It is a mistake, not merely in general and in the abstract, but also for a solid reason of State. Economists in this country lack the influence which—in their own opinion—they ought to have, largely because the public believe that on all topics they are hopelessly divided. Controversies conducted in the manner of Kilkenny cats do not help to dissipate this opinion. And yet in truth the opinion is largely mistaken. Among serious students the area of common agreement on fundamental matters is enormously wider than the area of dispute. Economists who take different sides on a practical issue are usually far closer to one another in the substance of their thought than either of them is to uninstructed partisans on his own side. It cannot be in the public interest that bad controversial manners should obscure this fact.

That cannot be in the public interest for this reason. Let it be granted to the economist that, in his science as in others, from a diligent pur-

suit truth will not always fly. But, if the final justification of his work is the fruit of practice, benefit through knowledge to human welfare, to *find* truth is not enough. Somehow the truth must be carried from the study to the market-place. Somehow it must be brought to the mind and utilised in the work of those persons who guide affairs. We cannot hope that this will happen quickly. The practical man is not, indeed, as has been unkindly said, merely the man who practises the errors of his ancestors. But inevitably the main part of his mental stock-in-trade consists of what he learned in youth before practical activities absorbed him. In a complex modern community the time-lag between thought and action *must* be long. But the economist, seeking, as best he can, through devious ways, an uncertain goal, believes, or at least hopes, that this time-lag will not be endless—that at last, maybe a whole generation hence, what he has won mankind will use. That is his act of faith. The warrant for it will be the firmer if the differences that necessarily exist among students of an advancing science are not, by a wrong emphasis, made to look larger than they are.

II

ECONOMY AND WASTE

I SHALL discuss to-day a matter which is in essence perfectly straightforward, but has become overlaid with confusions and misunderstandings. These misunderstandings have affected State policy with disastrous consequences. Here is an admirable example of the need for popular expositions of very simple truths, about which among serious students there is little or no dispute. It would be easy to make this lecture snappy by collecting and exposing before you further examples of the economic impotence of large sections of the Platform and the Press. I refrain from this, partly, I confess, because the process of gathering these pearls would be wearisome, but partly also because a positive and direct discussion is likely to be more effective in clearing up any latent confusions there may be in your minds or my own.

Let us begin by focussing attention on the concept a country's productive resources. These consist, in the old classical formula, of its land, its capital and its labour. Of those three factors, or, more properly groups of factors, it contains,

or controls, at any time certain stocks. Such portion of these stocks as is active or employed is conceived, after appropriate allowance to make good depreciation, as producing an annual flow of so much real income. This real income is made up of two parts—goods and services for current consumption and net additions to the stock of capital. We may thus, if we will, mentally divide up the standing stock of productive resources into three parts: one part that is idle or unemployed; a second part that is employed in making goods and services for current consumption; and a third part that is employed in making net additions to the stock of capital. For the present purpose this broad way of putting the matter will serve well enough. It is not necessary to bring into account the fact that productive resources may be employed sometimes for more, sometimes for fewer hours per day. No damage is done to the argument if we ignore this, assume that the hours per day are given, and suppose that, in respect of any given day, such and such a section of productive resources is either employed for that number of hours or not employed at all. Nor need we trouble ourselves with the fact that in different sorts of activity the several groups of productive resources, land, capital and labour, play different proportionate parts. Let us concentrate

attention upon the stock of productive resources as a whole.

First, for a preliminary point. I have spoken of the real income of any period as made up of goods for current consumption in that period *plus* the additions made in it to the stock of capital. If stocks of consumption goods were always held at the same level, goods for current consumption would be identical with output of consumption goods, and additions to the stock of capital with net[1] output of investment goods. But it may happen, and does happen on some occasions, that stocks of consumption goods are being piled up, on other occasions that they are being depleted. In the former event goods for current consumption embrace only a part of output of consumption goods, while additions to the stock of capital embrace more than net output of investment goods. In the latter event the opposite of this is true. Obviously, when the stocks of consumption goods are being varied, resources may be diverted from making goods for current consumption to making additions to

[1] The word 'net' is necessary because some new investment goods merely replace depreciation and do not add to the stock of capital. A discussion of this complication did not seem called for in the lecture. It should be noted, however, that, if costs are to be covered, money spent on consumption goods includes what is paid for that part of new investment goods which merely offsets depreciation.

the stock of capital, or *vice versa*, though no single unit of resources alters its employment in any degree. This, however, is by the way. For the present purpose we need not trouble about shifts in the stocks of consumption goods. Let us suppose them to be constant, and in the same way let us suppose that the stocks of goods in process—working capital—is constant. We may then identify goods for current consumption with output of consumption goods, and additions to the stock of capital with net output of investment goods. This does not affect at all the substance of what I have to say: but it enables me to dispense with complications in the exposition of it.

There are then three ways in which the situation, as between the main uses of resources, may undergo change. First, some resources hitherto devoted to making consumption goods may be turned to making investment goods, or *vice versa*: secondly, some resources hitherto devoted to making consumption goods may become unemployed, or *vice versa*: thirdly, some resources hitherto devoted to making investment goods may become unemployed, or *vice versa*. If the first sort of change takes place the volume of real income remains unaltered, but its constitution is modified. If the second sort takes place the volume of that part of real

income which consists of consumption goods is altered, but the volume of that part which consists of investment goods is unchanged. If the third sort takes place, the volume of real income that consists of investment goods is altered, but the volume that consists of consumption goods is unchanged.

So far I have put the alternative uses open to employed resources into two wide groups, the making of consumption goods and the making of investment goods. I have regarded each of these groups, so to speak, from the outside, ignoring the fact that each of them contains a large number of sub-groups. When this is taken into account an addition must be made to what has just been said. An increase or a decrease in the quantity of resources devoted to making a particular kind of consumption good may be brought about, in whole or in part, by diverting resources to or from that particular consumption good from or to other consumption goods. The same thing holds of an increase or decrease in the quantity of resources devoted to making a particular kind of investment good. This, of course, does not conflict with what I was saying about changes in the quantity of resources devoted to making consumption goods in the aggregate or investment goods in the aggregate. It is an amplification of this, not a correction.

We are now in a position to pass behind a description of facts to a consideration of causes. In a planned society, where a central government had command over all productive resources and determined by direct order how they should be used, the causes of whatever happened would, in the first line at all events, be simply the orders that the government chose to give. But, outside Russia, the uses to which productive resources are put are not determined in this direct way. They are a consequence rather of the interworking of the independent plans of a great number of private persons and of public authorities, operated through the mediation of money demand. While what happens at the last stage is simple and obvious, the processes by which it is made to happen are more complicated. It is in the popular attempt to understand these processes that confusion has arisen. Once started, the fog of misunderstanding has spread, not over the causal process alone, but over the simple fundamental facts as well.

The easiest way of approach is, I think, to begin with an imaginary situation. We suppose that there is a certain fixed body of productive resources and that the whole of them are destined to be employed continually whatever money price is offered for them. Their supply, in technical language, is perfectly inelastic. In these

circumstances, whatever anybody does with his money income, we may be quite certain that he cannot modify in any way the total quantity of labour and capital at work: though, of course, he may affect the rate of money earnings. The only avenue of choice left open has to do with the proportion in which the fixed quantity of productive resources will be directed towards different kinds of work. It will be engaged in making consumption goods and investment goods in the proportion in which the community spends its money on these two sorts of things. If in a given year the community as a whole decides to spend a larger proportion of its money income than hitherto on investment goods, the proportion of productive resources devoted to making these goods will be expanded to match. It is immaterial how much absolutely of their money income people choose to spend on consumption goods and investment goods together. They may, for example, decide to hold up half of it in stockings and not spend it at all. On the assumption that I am here making this makes no difference. All that matters is the proportion in which such part of their money income as they do spend is devoted respectively to consumption goods and investment goods.

In these conditions it is still possible to assert intelligibly that productive resources are being

wasted. Apart from foreign dealings, which need not now concern us, any one of three things may be meant by this. First, it may be meant that there is *technical* waste; in the sense that, in some or all of their uses, productive resources are operated in an incompetent manner; that with more intelligent arrangements a given volume of them might be made to yield a larger output. Secondly, it may be meant that productive resources are being engaged in making one sort of thing, when it would have been more advantageous to make another sort. For example, a critic may believe that too much of our productive power is being used to turn out goods for immediate consumption and too little in adding to the stock of capital equipment: or that too much is being devoted to making material things and too little to education or research: or, *per contra*, that too much is being devoted to education and too little to maintaining army, navy and air forces. Thirdly, it may be meant that productive resources are being engaged too much in satisfying the needs of one set of people and too little in satisfying the needs of others: that rich men are eating to excess while poor men are starving: in short, that productive resources are being wasted because the yield from them is improperly distributed. On the assumption that I am making now these three are the

only senses in which a community can intelligibly be accused of wasting its productive resources.

So soon, however, as that assumption is abandoned, and it is allowed that the community's productive resources need not all be employed always, a new and quite different sort of waste is possible: namely, not failure to use some of their productive resources in the best possible way, but failure to use some of them at all. From the point of view of long-period competitive equilibrium, when full adjustment is supposed to have been made to any change that may have occurred, this situation is ruled out by definition. In so far as economic writers have been engaged in discussing long-period tendencies they were fully entitled to ignore it. This practice on their part has, however, in some degree promoted a type of popular reasoning in which this kind of waste—apparent as it must be to anybody who looks at facts—is ignored also in the analysis of short-period problems. On the strength of this reasoning practical men have on occasions enforced policies, which might be well enough if this kind of waste could not occur, but whose dominant effect in certain conditions is to make it occur.

The nature of the fallacy which threatens here is easily illustrated. Suppose that the State or a

public authority has borrowed money internally —let us exclude the complication of external loans—and has employed it in building houses, railways, tramways and so on. It is found presently that these structures cannot earn enough to pay interest on the loans. Most of the money, it is then said, is irretrievably lost; the devoting of it to these enterprises has been sheer waste. What have we to say to this? We must draw a distinction. Plainly money itself cannot be lost or wasted. When it is said that this has happened, that can only mean that the real resources which the money has engaged in these particular activities has been wasted. Is the fact that they afterwards prove unable to pay interest evidence of that? The answer is quite simple. If conditions are such that, had these resources not been employed on the public works, they would have been employed otherwise, either in making other capital goods that *would* yield interest, or in making goods for immediate consumption, then the fact that on the public works they fail to yield the expected rate of return is evidence that to have employed them there was wasteful. To refrain from so employing them would have been a true economy, in the sense that economy is the opposite of waste. But, if the alternative to employing these resources on the public works was not to employ them at all, the situation is

quite different. The fact that they do not yield the return expected—a return sufficient to pay interest on the loans by which they were financed—is no evidence of waste in a general social sense. So long as they yield any return at all, society is better off than it would have been had they stood completely idle. If we assume that all resources would in any event be fully employed, we may properly—apart from certain obvious qualifications—condemn as wasteful uses of them that do not yield a normal return. But, if some resources would otherwise have stood idle, we can only condemn these uses for them provided that the rate of return from them is less than nil.

The difficulty for practice is that in some situations a particular policy will not create waste in the sense of resources abandoned to idleness, while in others it will. During the Great War conditions were such that what was loosely called "economy" did not create it. During the great slump conditions were entirely different, and it did create it. The Great War having come before the great slump, and economy then having done the State good service, when the great slump came, the same remedy was invoked against an entirely different disease. The root error made in diagnosis was failure to recognise that in this second illness the patient was liable

to a kind of wastage from which in the first he was, from the nature of the case, immune.

In developing this thesis, let us start by asking what precisely, from the standpoint of the economiser himself, economising means. It will appear in a moment that in common usage it means two different things, according as the economiser is a private individual or a public authority. Let us start with a private individual. Such an one is usually said to be economising when he is spending less money on consumption goods per week or year than he has been accustomed to spend on them recently. He is not usually said to be economising when he is spending less money in buying investment goods than he has been accustomed to do. In general then he will economise (1) when his available post-tax money income is smaller than it used to be, or (2) when, this money income being the same as it used to be, he is spending more money than before upon new investment goods, or (3) when he is buying pieces of existing property, or (4) when he is increasing his money balances, whether in the form of currency or of bank deposits. Further, an individual is generally said to be saving when he is spending on consumption goods less than the whole of his available post-tax money income: that is, when he is devoting any portion of it to any of the three last

uses that I have named. Thus, if his available post-tax money income is stationary, to economise and to save are the same thing. But, if his available post-tax money income is falling, he may economise without saving: if it is rising, he may save without economising. So much for an individual. A public body, by way of contrast, is usually said to be economising if its money expenditure on consumption goods and investment goods together is less than it has been recently; and this independently of whether its expenditure is financed out of loans or out of taxes or rates. Thus, broadly speaking, any economy on the part of a public authority entails an equivalent reduction in the amount of spendable money which it draws to itself from individuals through the medium either of taxes or of loans. It follows that, when private individuals and public bodies are both urged to economise, the intention is that, on the one hand, public bodies should raise less money from individuals, whether compulsorily or by loans, for all purposes together, and, on the other hand, that private persons should spend less money in buying consumption goods. This is the policy whose consequences in different situations we have to analyse.

Now it is evident that this policy is not complete, like the policy of a government that acts

by direct planning. Such a government not merely deprecates by negative choice or propaganda certain courses of conduct: it positively enforces certain others. A campaign for economy, in the sense in which I have been using the term, has a negative side, but no positive side to set against it. Public authorities are to raise less money from individuals, whether for income purposes or for capital purposes: individuals are to spend less money on consumption. It is obviously impossible to say what the effect of this will be until we know what individual economisers will do with the money that their economising, together with the economising of the public bodies, makes available for them. When local authorities stop off engaging £1000 worth of productive resources in some customary activity and reduce rates correspondingly, do the rate-payers spend this extra £1000 in engaging these resources or equivalent other resources? When a local authority decides not to raise £1000 by loan to erect a new building, does it happen as a consequence of this that somebody else raises a loan of £1000 and engages productive resources with it? When a private person spends £1000 less on consumption goods, does he in consequence, either himself or through the agency of a third party, spend £1000 more

on investment good than he would have done otherwise? If the answers to all these questions are yes, there is just as much money spent in engaging productive resources as a whole as would have been spent had there been no economy campaign: and, therefore, the rates of money payment to productive resources being supposed unaltered, the same total quantity of these will be engaged. There is a diversion of them from one set of uses to another. It may be that there is waste through the new uses being less advantageous than the old; or it may be that there is the opposite of waste, in the sense that the new uses are more advantageous than the old. But in any event there is not waste in the other and more fundamental sense that I have distinguished: no productive resources are simply thrown into idleness. If, however, the money released by the economisers is not spent on engaging productive resources—for the moment I leave aside the possibility that the rates of pay to these may be reduced—the total quantity of productive resources engaged is correspondingly diminished, and there *is* waste in this fundamental sense. Now, an economy campaign taken by itself leaves people with free choice as to the disposal of the money that it releases. What they do with it depends upon the various courses of action

which the surrounding situation offers to them. Until we know, therefore, what the surrounding situation is, it is impossible to predict in what way an economy campaign will affect the two kinds of waste of productive resources that I distinguished a little while ago.

Let us consider first the situation as it existed in the Great War. The Central Government stood ready to receive in loans every penny that the public could spare, and to spend this money in engaging productive resources to make articles of various kinds that were deemed of vital urgency for the conduct of the War. The economy campaign, therefore, had no tendency whatever to create wastage of productive resources in the sense of leaving them in idleness. Indeed not only was there in fact no wastage, but a great volume of productive resources, hitherto not active, was brought into employment. People came into industry from leisure; they postponed retirement; they began work at an unusually early age; they worked long hours and on special shift systems. At the same time the campaign had a strong tendency to estop wastage in the sense of utilising resources to satisfy less urgent needs while more urgent needs were calling for them. A large volume of resources was *diverted* to meet war needs for other occupations. Thus the economy campaign, as it was

conducted during the War, along with the associated campaign to restrict private persons from using their money to buy investment goods for themselves—to have their houses re-decorated and so on—was correctly adjusted to the end which the Government had in view. That end was to direct the maximum possible amount of the country's productive resources into the service of the War. The then economy campaign, in spite of the errors and even absurdities inevitable in a great improvisation, contributed successfully towards that end. The goal sought was clearly seen: the road that was chosen led towards it.

Turn now from this situation to that presented by the great slump. If in these conditions, as a result of propaganda or of government order, a municipality refrained from raising a loan to build houses or a swimming bath, nobody else was likely in consequence to raise an equivalent loan for some other purpose. If a private person, thinking himself patriotic, dismissed his gardener or his chauffeur, or bought fewer neck-ties, there was little prospect that as a consequence, either directly or through a third party, he would buy correspondingly more investment goods. In these circumstances, unless the rates of pay that workpeople and the owners of equipment were prepared to accept con-

tracted in response to the contracted money demand, this economy campaign led, and necessarily led, to waste in the sense of productive resources being simply laid idle.

It is sometimes objected to this reasoning that, if, in consequence either of their own or of local authorities' economies, private persons find themselves with more money in hand than they would otherwise have had, and do not spend it themselves on consumption goods or investment goods, they are bound either directly, or indirectly *via* somebody else through whom they buy a piece of property, to put it in the bank, and the bank will then, fulfilling its normal function, lend it out for use by a third party. This specious, but false, reasoning has been once for all exploded by Mr. Robertson's work. Broadly speaking, the quantity of money in the banks—bank deposits—will be the same whether the owner of a certain balance hands it over to somebody else in purchase of work, or keeps it in his own hands idle. Total expenditure in buying the services of productive resources is reduced, not because the quantity of bank deposits is altered, but because the rate at which they are turned over into income is slowed up. This slowing-up process, if anybody so acts as to provoke it, is not subject to any automatic correction by bank action. For this reason in a period of depression

the ratio of total money income to total bank deposits is much smaller than in a period of business activity. Indeed that is obvious to common sense. For, if the popular analysis, which makes one man's contraction of money outlay imply a corresponding expansion of money outlay by another man, were valid, those processes of fluctuation, which everybody knows occur, would be proved *a priori* to be impossible! The straightforward conclusion that in a period of slump economy campaigns directly waste productive resources by throwing them out of employment cannot be upset by this kind of popular pure theory!

There is also sometimes offered a further answer—a partial, not a total, defence of economy campaigns in a period of slump. A number of persons have drawn a sharp distinction between economising by private persons and economising by local authorities. The former kind of economy is, they agree, mistaken, but the latter kind they strongly defend. Are there any grounds for this distinction? Now it is, of course, legitimate to argue that, when people's incomes are reduced, if the expenditure of municipalities out of rates is maintained, the distribution of income between purchases of private goods, such as food and clothes, and purchases of public goods, such as street cleaning and so on, will be im-

properly adjusted: for the whole of the cut that reduced incomes have made necessary will be thrown on the purchases of private goods, whereas *prima facie* it ought to be shared between both groups. If we feel assured that money released by municipal economising will in fact be used by the rate-payers in private purchases, this argument has force. But that is not what the advocates of municipal economising have chiefly in mind. The expenditure which they are especially anxious to cut is municipal expenditure *out of loans* on capital objects, such as houses, roads, swimming baths, museums and so on. It is this class of economising by local authorities on which controversy chiefly turns.

There is one preliminary matter to clear out of the way. Some of those who have been especially vocal in demanding restriction of municipal activities in the great slump belong to the class distinguished by Professor Cannan, who, when a private company borrows money to build houses, praise it as "raising capital", but, when a municipality does exactly the same thing, condemn it for "incurring debt". In the company's hands they see nothing but the houses—assets; in the municipality's nothing but the obligation of their loan—liabilities. Consciously or unconsciously these persons, taking advantage of the fact that the word economy is in the air, have used it to

bolster up a general policy that has nothing whatever to do with the special circumstances of the slump. But this is to confuse the issue. The general merits or demerits of municipal activity are not in question here. What concerns us is the case for municipal economising on capital expenditure during slumps, *as a weapon against slumps*, not an incident in a campaign against municipal expenditure in all periods.

Now *prima facie* it seems evident that, considered as a remedy for slumps, municipal economising on capital objects has even less to be said for it than individual economising on consumption goods. For, whereas the second sort of economising may be offset by increased individual expenditure on investment goods, it is very unlikely that this kind of municipal economising, if practised in a slump, will be offset at all. There must, however, be something in the minds of those who advocate this policy: and we have to discover what it is. The root of the matter, I suggest, is this. If we take the standpoint, not of the community as a whole, but of that part of the community other than the owners of the labour and equipment which the building of houses or swimming baths by a municipality would employ, it is open to us to argue that these houses and swimming baths would be worth less than the money paid to

the people who make them. In other terms, the virtuous part of the public, who would have incomes anyway, will be mulcted for the benefit of the unvirtuous part who, apart from municipal extravagance, would be unemployed. Now, if it were true that the continuation of municipal enterprise during the slump has this effect, it would have to be reckoned *pro tanto* as a point in favour of municipal economy. For, should a plutocrat assert that it is more important for him to have ten courses at dinner than for the town to have a swimming bath, there are no dialectical means of refuting him. But for the present purpose it is not necessary to refute him. If we assume, as for this purpose we must do, that the level of municipal investment in normal times is roughly such that, at the margin, it would correspond to its cost, the case for maintaining it in a period of slump is, even from the standpoint of my imaginary plutocrat, overwhelming. In boom times, if the level of this investment were reduced, the workpeople set free would, very likely, be engaged elsewhere. No addition to unemployment would result. In a period of slump, on the other hand, the displaced workers, or a corresponding number of others, are almost certain to become unemployed. They then, under the English law, must be paid unemployment benefit. The rest of the community—my imagin-

ary plutocrat—saves, not their wages, but their wages *minus* this substantial amount. In the conditions I am supposing it is evidently very unlikely that this saving offsets the value of the things that, if the scale of municipal investment had not contracted, the displaced men would have made. There is, in short, a clear case for making municipal investment larger, not smaller, in times of slump and in times of boom. In times of boom it only pays for itself at the margin if the product of the marginal man employed is worth his wage. In times of slump it pays for itself if this man's product is worth his wage *minus* the rate of unemployment benefit: is worth, that is, say, two-thirds of his wage. Some economists have claimed to add in here, as a further element on the assets side, the extra taxes which the State collects from those whose incomes are increased by municipal activity. From the narrow standpoint of the Budget this is correct; but from the wider standpoint taken here that element of gain is a transfer, and not relevant. But this does not matter. The case is watertight without it.

But, if it is thus watertight, if what I have been saying is true—and I must warn you not to take it upon trust, because not all of it would be accepted by all economists—if it is true, how was it that the economy campaign of the last few

years came to be adopted? Here is a tentative suggestion. Statesmen confronted with the great slump were handicapped, as against their predecessors in the Great War, by the fact that this time there was no single simple and obvious goal to aim at. Difficult as it is in practice to harness industry in support of armed force, the task to be done is at least definite and clear cut. But the great slump was no dragon with successive heads visible to be hewn off. It was a foetid crawling miasma, no part of it apparently more vulnerable than any other. What were statesmen to do? I do not imagine that, if the great slump had come upon them by itself, it would have occurred even to the most original among them to engineer an economy campaign—to attack a disease whose chief symptom was that people were spending and investing too little by propaganda in favour of spending and investing still less. But the great slump, when it fell upon the country, did not come alone. It was closely accompanied by the crisis of the £, a crisis which, in turn, was in part due to distrust engendered by the lack of genuine balance in our Budget. To stop the crisis in the £ it was believed—probably rightly—that the budgetary position must be fortified. One obvious means to that end was economy in the sense of diminished expenditure by the Central Government. This

was the door through which the word economy entered our rulers' minds. But, the word having so entered, with the significance reduction in the Central Government's expenditure, it quickly blossomed to include reduction in the expenditure of local authorities and also reduction of expenditure by individuals, at least on consumption goods, more doubtfully on investment goods also. Some voices, indeed, were raised in protest. It was pointed out that, though, in view of the Exchange situation, there was some case for inviting individuals to limit their purchases from abroad, there was no case at all for inviting them to spend less at home. But this was an academic subtlety unworthy of practical men. In this way there grew up and developed a full-fledged economy campaign, on the pattern of the economy campaign of the Great War. Nor did it relax its pressure when the gold standard was abandoned and the case for it, even in respect of purchases from abroad, was thereby greatly weakened. A remarkable situation and not a creditable one! A policy engendered from a confusion between two meanings of the word economy! Our national education in elementary economics is still incomplete.

There remains one further thing to say. I have tacitly assumed that economy campaigns are primarily directed to cutting down the amount

of money spent while the rates of money payment to productive agents are left intact. The recent economy campaign has, broadly speaking, been of this character. It is true that, as an incident in it, the Central Government also cut down the rates of pay to civil servants and to teachers in elementary schools. But, as the number of these persons is, for all practical purposes, fixed independently of their rates of pay, the repercussion of this part of the Government's policy was not substantially different from those of any other part. It is possible to imagine an economy campaign of an entirely different character; one which seeks to counteract the slump by securing cuts in the rates of pay asked for by labour and capital in the hope of thereby causing more men to be employed. This policy, if it could practically be carried out, would, in my view, be a true antidote, within its limits, to slump conditions. It would not abolish, but it would effectively lessen the waste of unemployment. There is, I should add, a contrary opinion upon this matter among writers whose opinions deserve respect. Therefore, though I put my own view before you, I do not wish to lay it down as something incontrovertible. In any event that issue is not the one with which this lecture has been concerned.

III

THE BALANCE OF TRADE

For goods that pass from one part of the same country to another part statistics are not usually collected. But, for a long time, with varying degrees of completeness, they have been collected for goods that pass between different countries. This has been done partly in connection with revenue raising and partly because these figures have been found interesting. Moreover, since, in any event, some sort of Government control is exercised at frontiers, the task of collecting them can be fitted fairly easily into the machinery of administration. To obtain the same sort of information about internal movements of goods would be expensive and very irritating. That the main part of the statistics of trade which have been and are available should be statistics of *international* trade is, therefore, quite natural. But it has, none the less, had certain unfortunate effects. To obtain a background for the main subject of this lecture I shall begin by saying a little about these.

The first and most obvious of them is this. Having statistics of the external part of the

trade done in the country, and no statistics for the much larger internal part, politicians and popular writers have tended to use the external trade figures as a measure of economic prosperity. Very crude fallacies result. Thus some country, whose foreign trade was recently very small, has enjoyed a much larger proportionate increase of trade than England has done. The island of Utopia, which last year exported one banana, this year exported three. Its trade has grown by 200 per cent, while ours, degenerates that we are, has only grown by, say, 5 per cent. Again the fact that, as England grew richer, she was bound to devote a smaller proportion of her resources to the purchase of food and raw materials—things responsible for the bulk of her foreign trade—and a larger proportion to non-imported goods has often been ignored. When, on account of this process, the rate of growth in our foreign trade has slackened, it has been supposed that here is solid proof of national decline. Yet again the fact, obvious to economists, that a country's trade may grow *either* because it is prosperous and has exports to spare, *or* because it is distressed—for example through a bad harvest—and has dire need of certain imports, is seldom recognised. In short, the significance of foreign trade and of movements in it, as represented in the statistics, has been widely

misconceived and grossly misinterpreted. The general vagueness of popular—and not only popular—thought on the subject is well illustrated by this curious fact. When I was an undergraduate, the figure in common use—it was, if I remember rightly, regularly embodied in the Statistical Abstract of the United Kingdom—was the sum of the values of our imports and our exports *added together*! What useful information that figure was supposed to convey, I confess that I have never been able to understand.

But this *sum* of values—imports *plus* exports—has not played the leading role in foreign trade discussions. It is the difference of values, imports *minus* exports, that has done that. Here is the crudest form of the concept *balance of trade*—simply the excess of the money value of recorded commodity imports over that of recorded commodity exports. One might expect *a priori* that the plain man, looking at this figure for the first time, would want it to be as large as possible. For, after all, exports are what the country sends away, imports are what it brings in. The larger the excess of its receipts over its outgoings the more fortunate it would seem to be. But in fact the plain man does not look at the matter in this way. To him an excess of recorded imports over recorded exports is never a thing to be welcomed; it is always a thing to

be deplored. It constitutes, in the most primitive meaning of that term, an *adverse balance of trade*; the very word adverse implying something injurious.

How is this attitude of mind to be accounted for? It may be, since these matters have chiefly interested traders, and traders are accustomed to regard large sales as a main test of success, that their point of view has spread itself over the community. For the public at large exports are a measure of their own sales and imports as a measure of their rivals' sales, which it would pay them to capture: so that, the bigger exports are and the smaller imports, the better off they will be. But, I suspect, the true source of what Professor Cannan has called the love of exports and hatred of imports is something other than this. It is a dim perception that the records do not tell the whole story: that, if recorded imports exceed recorded exports, something has to be paid out to make good the gap: for, after all, it is *prima facie* improbable that the wicked foreigner will send us goods for nothing. Having grasped this fact, it is natural for the thinker, whose mental processes I am endeavouring to follow, to inquire somewhat suspiciously what this something is. The idea comes to him that it can only be one thing, namely, gold! Some thirty years ago, upon a Prime Minister of New

Zealand, a Mr. Seddon of immortal memory, this idea fell with a resounding crash. He informed the world, as a matter, not of theory, but of hard practical fact, that for every £ excess of British imports over British exports in any year, there was sent abroad one golden sovereign! If there is anyone here who desires to make money out of the popular Press let him write an article, with illustrative pictures, calculating the cubic volume of gold and the number of tons weight which has, by this insidious process, been withdrawn from British gold mines and lost to us during the last 100 years. I have no doubt there are several markets in Fleet Street where an article of that kind could be sold for a good round sum!

But, of course, great thoughts like this do not hold undisputed sway for long. There have always been a few statistically minded people who, when a figure is quoted, are anxious to find out how that figure is built up. In this particular field they ask at once whether all goods that are imported and exported are always entered in the records. Here some curious facts emerge. Up to a certain date ships built in this country and sold abroad did not appear among our exports; after that date they did appear. During the war years goods imported on Government account were not for the most part included in

the records; but sometimes they were included. In July 1917 it appeared on the face of the figures that there had been a sudden and enormous increase in our importation of oil. The explanation was that in that month, for some mysterious reason, Government imports, so far excluded, began to be included. There is a further awkwardness in that some countries, for example the United States, value imports at the place of embarkation; others, for example this country, value them on landing—and so reckon in the transport charges. If all countries adopted our plan, and if there were no elements in international business other than imports and exports of commodities, it would follow that the figures for total world imports must necessarily exceed that of total world exports: a result which at first hearing sounds paradoxical.

But these are minor matters. Our statistically minded inquirer will soon unearth points that are quantitatively much more important. The statistics of imports and exports, as recorded in the trade returns, refer only to imports and exports of material commodities. They take no account of immaterial services. But these have a very large value: and, as it happens, for this country come in predominantly on the export side. The services rendered to foreigners by British ships and by British banking and

commission houses stand, of course, on all fours with British exports of cotton goods; but their values are not counted in the figures of exports. They are in effect *unrecorded* exports. When account is taken of them, a substantial part of the gap between the values of recorded imports and recorded exports is filled up. If we choose, we may call these things "invisible exports". Clearly they ought to be counted along with recorded imports and exports. According to estimates made by the Board of Trade, we get these figures. In 1932 the excess of *merchandise* imports (including silver coin and bullion) was £287 million. When the values of shipping and commission services sold to foreigners is added to our exports of merchandise, this figure is reduced by £95 million, namely, to £192 million. In that year, according to the Board of Trade's estimate, there were also net miscellaneous items amounting to £15 million that should properly rank with exports: so that the final adverse balance works out at £177 million: that is to say, we were receiving from abroad £177 million worth of stuff and services in excess of what we were sending abroad.

Now a group of people making up a country may obviously in any year have claims on foreigners or obligations to them that have nothing to do with any trading done during that

year. The private persons who have made investments abroad in earlier years have claims to interest: and Government may be entitled to receive, or under contract to make, payments in connection with past loans or current reparations. Plainly, so far as claims and obligations of this kind exist and are met, they must be represented in a corresponding excess either on the import or the export side of the account. In 1932 the Board of Trade estimated the income of British citizens from overseas investments at £145 million, against which there were to be set payments abroad by the British Government of £24 million. The difference between these two figures, namely, £121 million, would account for that amount of excess of import values over export values. There is left a net adverse balance on income account of £177 million *minus* £121 million, namely, £56 million.

Now what precisely does that mean? How is it possible that there should be an adverse balance, or, indeed, that there should be any sort of balance on either side? When all relevant items on both sides are reckoned in, is it not necessary, in the nature of things, that the two should precisely offset one another? The answer, of course, is that the account, which the Board of Trade is accustomed to draw up and which I have been discussing, is—subject to the inclusion

in it of silver coin and bullion—an income account. Transactions relating to the lending or repayment of capital and to movements of gold are not brought into it. Now for a group of persons, just as for a single individual, what it receives as income and what it spends for income purposes need only be identical provided that it is not receiving anything otherwise than as income and is not spending anything otherwise than for income purposes. Obviously if it is lending capital or repaying past loans of capital or is bringing in gold, it must be exporting abroad more on income account than it is importing: it has a favourable balance on that account. If it is borrowing capital or being repaid capital, or is sending out gold, it must be importing from abroad on income account more than it is exporting: it then has an adverse balance on income account. An adverse balance then of £56 millions in our income account for 1932 meant that in that year we were drawing on our capital assets abroad, or incurring new capital obligations abroad, or sending out gold to that amount. Provided that the Board of Trade estimates are correctly drawn that is what the statistics mean. There is nothing mysterious about them. It is just simple arithmetic.

None the less, when the figures for the last year or two are set beside the corresponding

figures for earlier years, there does emerge a striking fact. Down to the year 1929 the income account of our foreign trading had always shown a substantial favourable balance, which implied, since net gold imports did not in fact amount to much, that we were annually adding a substantial amount to our holdings of capital assets in foreign countries. In 1930 the balance, though still positive, was small; in 1931 it became a large negative quantity—*minus* £104 million; in 1932 it was *minus* £56 million; in 1933 it had recovered to *minus* £4 million, still very far, however, from the large positive balance to which we had been accustomed. It is not perhaps surprising that this sharp change in our business position in relation to foreign countries should have been a source of perplexity and of some disquiet. Let us consider in a general way how far there is ground for this.

Taking in imagination a broad survey, we should expect to find at any time some persons and some groups of persons predominantly lending capital and others predominantly borrowing it. Moreover, it may easily happen that the same person or group of persons that is in one year predominantly a borrower may in another be predominantly a lender or investor. Looking at the particular groups of people contained in countries, we find as a rule that new and

undeveloped countries are net borrowers from foreigners, and old-established countries net lenders to foreigners. But it may, of course, happen on occasions that the role is reversed. It is impossible to say *in a general way* that it is a good thing to be a borrower or a bad thing. When we want to imply that it is a good thing we usually say—to repeat what I said in my last lecture—that our friend is raising capital; when we want to imply that it is a bad thing we say that our enemy is incurring debts. But, of course, in fact whether it is a good thing or a bad thing depends entirely on the circumstances. For the *a priori* prejudice that to incur debt, *i.e.* to raise capital, is necessarily a bad thing there is no justification whatever.

This is an important point and needs to be developed. If an individual in any year or series of years draws upon his capital and devotes the proceeds to income purposes, he *pro tanto* lessens his total stock of capital. We may, therefore, properly say, if we choose, that he is living on his capital. In some circumstances this may be a wise thing for him to do—if, for example, he has to meet an emergency that he has reason to expect will soon pass. But it certainly means that he has a smaller stock of capital available afterwards. Therefore, *prima facie*, if a man really is living on his capital, there is some

ground for mistrusting his prospects; and the same thing is true of a group of people making up a nation. But—and this is the point—the mere fact that such a group is calling in capital *from abroad*—is depleting its foreign-owned stock of capital or increasing its capital obligations to foreigners—is no proof at all that it is depleting its total stock of capital, or *living on its capital.* When a new country borrows heavily from abroad, the object of its people in doing this is usually to build railways or undertake other forms of development. In substance what they do is to borrow railway material from foreigners and set it up in their own country. The capital debt abroad is offset by a capital asset at home. There is no living on capital. On the contrary, as a general rule, the value of the capital asset created at home with the help of the foreign loan is substantially larger than the value of the loan. Nor is this all. Suppose that it is an old country which is drawing in capital from abroad, and even suppose further that the particular people who draw in the capital do in fact live on it; that they sell American securities and buy with the proceeds French champagne for immediate consumption. Even then there is no proof that the country as a whole is living on its capital. Other members of it may quite well at the same time be creating

capital assets at home which more than offset those capital assets formerly held abroad and now destroyed by the champagne drinkers. In popular discussions this point is usually overlooked. When it appears, as it has appeared during the last two years, that British capital held abroad is being depleted, this is taken to prove that British capital in the aggregate is being depleted; no attention being paid to the substantial new investments that are at the same time being made at home. In fact, as Professor Cannan has shown in vigorous language, this country is nowhere near the point of living on its capital in the only really significant sense, namely, depleting the aggregate amount of its capital assets. The additions made annually to our stock of capital have, indeed, in the last year or two probably been smaller—rough allowance being made for changes in the value of money—than they were a short time ago. Everybody knows that the whole world has been passing through a very serious depression. But even during these quite abnormally bad times our capital stock as a whole has been augmented, not decreased. Even in the worst year of all, 1931, for which our adverse foreign balance on income account has been put at £110 million,—offset to be extent of £35 million by gold exports—the contemporary additions made to

fixed capital at home have been estimated by Mr. Colin Clark at £185 million, while there is no suggestion that other forms of home capital substantially declined. So far as this aspect of the matter goes, the emergence of an adverse foreign balance on income account, even though it implies a reduction in our foreign-held capital, is not a thing to be taken over-tragically.

Are we then to say that there is nothing at all in the fuss that has been made; that the excuse, which has led many competent people to acquiesce in a complete reversal of our whole fiscal policy is a *mere* excuse—a mere piece, so to say, of political flapdoodle? The answer to this is clearly No. It is quite true that on the Platform and in the Press there has been hopeless confusion. The adverse trade balance, which has always existed in the sense of an excess of recorded merchandise imports over recorded merchandise exports, and which is, of course, of no significance, has been mixed up with the adverse balance on income account, of which I have just been speaking and which is, as I have said, a new thing. To this confusion has been added the astonishing theory that every £'s worth of imported goods means necessarily and permanently a £'s worth less of employment for British workpeople. Indeed, to take once more a metaphor from Professor Cannan,

the Augean stable reeks very foully. Nevertheless, behind all this and in spite of all this, the emergence of an adverse foreign balance on income account has in truth been a serious matter.

This for two reasons. First, apart altogether from the incidents of adjustment, it has been serious in the sense that it is an *indication*, not a cause, of serious losses. Thus it is partly due to the fact that people who owe us interest abroad have recently been paying much less than usual, through default on fixed-interest securities and through the failure of profits on investments of variable return. It has been estimated that in 1932 we were receiving under this head £110 million less than in 1929. As a necessary result we are compelled either to import less or to invest less abroad—which means a reduction in our capital assets below what they would otherwise have been. The adverse movement in our balance on income account has been a sign of these things: and they are genuine misfortunes. This is, indeed, obvious, and I shall say no more about it.

The second reason why the adverse movement in the trade balance has been a serious thing is more complex. It has been serious because, under the gold standard, the process of adjustment to the changes that turned the

balance against us entails difficulties from the side of money. It is important to realise that these difficulties arise, not out of any given state of a country's foreign balance, but out of the process of transition from one state to a second state. There need be no difficulty on the monetary side whilst a country has, as a regular thing, a reasonably stable adverse balance on income account associated with and due to borrowings from abroad. Evidently the mere fact of having an adverse balance on income account cannot by itself entail monetary disasters. For it has, as I have said, been the rule for new countries to have an adverse balance; and their monetary systems have, nevertheless, usually functioned normally. The monetary difficulties, which, round about the year 1931, were undoubtedly associated with an adverse foreign balance, arose, not out of this adverse balance as such, but out of the need for making adjustments to a balance that was rapidly becoming *more* adverse.

Let me put the case as broadly as possible. For various reasons, which I shall not try to analyse here, industry throughout the world began in 1929 to contract violently; and the contraction was accompanied by a heavy fall in gold prices. In the middle of 1929 the index of wholesale prices for the United States stood

at 98. By the end of 1930 it had fallen to 81 and by June 1931 to $73\frac{1}{2}$. Over a period of two years the index had been falling at an average rate of no less than 2 per cent per month. This enormous movement, initiated outside England, could not fail to react on England. The foreign demand for English exports inevitably fell heavily, while *per contra* our demand for imports was stimulated. At the same time, as I have said, payments of interest by foreigners on our foreign holdings largely contracted. In consequence of these things an abnormal gap between the aggregate values of our imports and of our exports was created. This gap was partly filled by a reduction in our rate of capital investment abroad. It could not without the adoption of special devices by the State and the Central Bank be filled completely in that way. There was, therefore, set up a strong tendency for gold to be drained abroad. In so far as the gold actually flowed, and equally in so far as the Central Bank took action to prevent its flowing, money rates tended to rise, prices to fall, exports to expand and imports to contract. This is the normal mechanism by which adjustment is made to an adverse movement in foreign trade conditions. In a perfectly frictionless world there would be nothing objectionable about it. Money wage

rates would adjust themselves forthwith to the price movement: and, though, of course, the depression abroad, with its reaction on the real demand for our exports, would injure us in some degree, so far as the money situation went, all would be well. Prices and wages, still in appropriate adjustment to one another, would slide down to a lower level. In terms of gold everything would be worth less, but, in the main, this would be merely a book-keeping change. The actual world unfortunately is not perfectly frictionless. The mechanism of adjustment does not work smoothly. Particularly it does not work smoothly when the changes to which adjustment must be made are rapid downward changes. For downward movements in money wages and other costs are strongly resisted. This jars the adjusting mechanism, and there results grave industrial depression. In the period of the great slump the heavy price fall, coupled with the failure of money costs to fall correspondingly, was the main channel through which catastrophe struck employment here. During the two years between June 1929 and June 1931, when, as I have said, American wholesale prices were falling 2 per cent per month, the number of insured persons unemployed in this country rose from something under one million to something over two.

Now, if we were to defend ourselves in any degree against the evil consequences of the causes behind our worsening foreign balance, it was necessary either that money costs should somehow be persuaded to fall with prices or that the downward movement of prices should be arrested. The first of these remedies was hardly practicable. Much has been said recently about the rigidity of the wage system under modern conditions; and it has been argued, in my opinion rightly, that the unwillingness of trade unions to allow money wages to fall at all even when prices had fallen largely has made the volume of unemployment substantially bigger than it need have been. But, in view of the extreme rapidity of the price decline, no system of money costs, however plastic, could reasonably have been expected to adjust itself to what was happening. I have already said that over the two years ending June 1931 the index of American wholesale prices fell some 25 per cent. In this country the Board of Trade's general index number of wholesale prices moved from 82 to 62, also approximately 25 per cent. To grasp better how tremendous a fall this was compare it with the great price fall from 1874 to 1896. In that period of twenty-two years the price level fell some 40 per cent. That is to say, the fall *per year*

was less than the fall *per month* in the depression of 1929! To defend itself against this by money cost adjustment was more than any country could hope to accomplish—much more than any country, even the United States, where everything is far more plastic than here—did, in fact, accomplish.

There remained the other method of defence. Could the price fall itself be stayed? For one country in a gold standard world, so long as the gold standard was maintained, this could only be done if *either* international action stopped the appreciation of gold in the world as a whole *or* the one country succeeded in raising its own gold prices relatively to world prices. The first of these alternatives I shall not discuss. Plainly it lies outside the power of any one country acting alone. It was about the second alternative that, before our departure from the gold standard, discussion among economists chiefly centred. The fundamental difficulty was that nobody could foresee at any stage of the depression what the future movements of world gold prices were going to be. The issue to be faced was, therefore, not clear-cut. According as one expected world gold prices to move up again shortly, or to become stable shortly at their then level, or to go on falling still further, one would tend to favour different policies. In the circumstances it was

natural that considerable disagreement should exist about what it was advisable to do. Some competent persons believed that the least harmful thing would be to do nothing at all; for any attempt to stay the fall of prices would merely increase the rigidity of money costs, so that, in the net result, the gap between prices and costs would be widened rather than narrowed. Others called for positive action, and advocated the use, sometimes of one, sometimes of both of two weapons.

The first weapon is free release of gold by the Bank of England offset by an equivalent purchase of securities in the market; so that, in spite of the gold drain, credit at home should not be restricted. Between 1926 and 1929 this device was in fact employed by the Bank of England with some freedom. Clearly as a method of defence against *fluctuations* in foreign pressure it may be very effective. It provides a cushion by which the shock of short-period change is absorbed. But against a continuing adverse movement the device cannot succeed. If the gold standard is to be maintained, it cannot, in the face of a prolonged fall in world prices, prevent a fall in the price level of this country also. Moreover, since, while it rules, the normal corrective to an excess of imports is not being applied, this excess and the associated drain of

gold will continue even if the downward movement in foreign prices stops.

The second weapon to which appeal was made is, for my present purpose, more important. It was claimed that by a tariff on imports—and *a fortiori* by a tariff on imports *plus* a bounty on exports—the adverse foreign balance on income account could be so far corrected that the tendency towards a gold drain would be weakened and prices here—not merely the prices of imported goods on which duties were imposed, but all prices—would be raised relatively to world prices.

Consider in this connection a general import tax *plus* a general export bounty, say at 10 per cent, as was proposed by Mr. Keynes. The import tax part of the plan would tend to turn the terms of trade in our favour and at the same time to lessen the amount of trade. The export bounty part of it would have in these respects an exactly contrary effect. Apart, therefore, from the fact that some imports come in otherwise than as payment for exports, the plan as a whole is neutral in respect both of the terms of trade and of the amount of trade. Neither of these things is affected at all. But, though the two parts of the plan in this matter pull in opposite directions, in the matter of money their pulls are in the same direction. The import tax, by checking imports

while leaving exports intact, tends to draw in gold to fill the gap. The export bounty, by expanding exports while leaving imports intact, also tends to draw in gold. Thus, without altering the real conditions of trade, the plan, nevertheless, exercises a twofold pressure towards raising prices in the country that adopts it as against general world prices.

I am not concerned here to discuss the merits of this plan as a practical political proposal. One distinguished public man of my acquaintance wished it to be adopted, to be maintained until the price level of 1929 was restored, and then to be withdrawn. He bisected himself in an interesting manner into an economic half and a political half. When speaking with the voice of the economic half it was, he maintained, his duty to forget that politicians in actual fact would certainly not carry out this programme. For the present purpose I shall follow this example and call your attention only to the strictly economic aspect of the plan. Much the most important thing to notice is this. The plan was certainly competent to hold the English price level above the world price level without any abandonment of the gold standard. If, therefore, the world price level were fixed, but, from our point of view, stood somewhat too low, the plan could quite definitely set this matter right—subject to one

difficulty. This difficulty is that, if our price level were pushed up absolutely, there would be a tendency for higher money wages to be asked for; and, in so far as they were conceded, the removal of disequilibrium between money prices and money costs—the ultimate object of the plan—would not be achieved. Still, it may well be argued, with unemployment abnormally large, this reaction would not make itself felt. In that case, given that world prices were "too low" but were not still falling, the tariff-bounty plan might have achieved its purpose. But, if world prices were not merely too low but *were* still falling, this plan, though it would lift prices here relatively to foreign prices, could not possibly lift them in an absolute sense. As the foreign price level continued to fall, presently, after a momentary boomlet, our price level must fall too. To prevent that we should need, not a fixed rate of tariff and bounty, but a rate that rose progressively in correspondence with the fall of world prices—an arrangement of enormous practical difficulty. Naturally then the tariff-bounty plan had much greater attractions for people who supposed that the world price level had reached its lowest point and had come to rest than for those who anticipated a further progressive fall.

I have spoken at some length about this particular device for resisting a downward drag on

prices by operating on the balance of trade, because it has a certain academic interest. But it would be very misleading to stop at that. Not in England only, but over a large part of the world, before the abandonment of the gold standard by this country, governments were endeavouring, by one or another expedient for improving the balance of trade, at once to maintain their price levels and to retain the gold standard. This is the dominant cause of the immense mass of high tariffs, quotas, exchange controls and similar restrictions that have grown up in the last three years. Ordinary protectionist motives have, of course, also been at work, but the main motive, as Mr. Hawtrey has well said, has been to maintain currencies at or near gold parity in face of a gold situation which would make the effort, unassisted by any restriction of imports, insupportable — insupportable because of the downward pressure that would be exerted on prices. The tragedy has been that, while for any one country this policy might achieve its purpose, for the world as a whole it could not possibly do so. No country can improve its trade balance in the sense relevant here except by worsening the trade balance of other countries. If everybody individually tries to increase imports relatively to exports everybody collectively must fail. The thing aimed at is not attained:

but, as a by-product of the effort, the volume of world trade, imports and exports alike, is enormously contracted; and the volume of unemployment correspondingly increased.

From this momentary and depressing glance at the outside world, return to events here. In the summer of 1931 economic decay was followed by financial crash. From Austria through Germany the blow fell on London. In September Parliament, by legally prohibiting the export of gold, except under licence, and making Treasury and Bank notes inconvertible, abandoned the gold standard. At one stroke, therefore, the tie which had hitherto bound our price level to the level of world gold prices was broken. An adverse trade balance on income account had no longer power to drain our currency resources abroad, and so to force high discounts and low prices. The whole situation was transformed. About the nature of the transformation there has, indeed, been serious confusion. Some writers have argued as though, provided a country is not on the gold standard, *any* set of foreign obligations will always automatically be adjusted through movements in the exchange. This is not true. If the foreign obligation is in foreign currency, it may be *impossible* for the debtor country to liquidate it, whatever happens to the rate of exchange or

however much exports it sends away. But it is true that in a situation, such as that which confronted England in 1931, an adverse movement in the trade balance, which, under the gold standard, must be dealt with by a mechanism involving a fall in prices, could, when the gold standard was abandoned, be met instead by a fall in the exchange. Let me put the point in another way. So long as the gold standard held, unless counteracting measures were taken, a low foreign price level entailed a low price level here, and a falling level abroad a falling level here. The reason is that the rate of exchange between English money and foreign gold money could only move within the narrow limits of the specie points. But, with the gold standard broken, the rate of exchange is no longer tied like this. *Any* relative state of English and foreign prices could be sustained and the rate of exchange adjusted to it. A fall in foreign gold prices need no longer drag English prices down because it could be offset, English prices remaining constant, by a fall in the gold value of English money. If, therefore, it was desired to insulate the English price level from the world price level, there was no longer any need for an import tariff or any analogous device. This goal could be attained without it. It could not, of course, be attained if foreign gold prices

continued to fall, except at the cost of *falling* exchange rates. Anybody who wished to keep a check on these rates was still entitled to advocate a tariff on that ground. But the old ground, on which in fact it had been advocated, that it was a necessary means of holding up our price level—the general price level, not merely the prices of taxed goods—was cut away. At the same time measures for accomplishing this purpose, such as government expenditure on public works, which, with a gold standard, could hardly, in the face of falling world prices, have held prices here, were now fully available. Confronted with this situation and anxious to promote a rise in our price level, the Government, with the best intentions, adopted two courses. On the one hand, it imposed a tariff, now not needed for this purpose. On the other hand, so far from expanding expenditure on public works, it pressed upon local authorities an economy campaign, whose inevitable effect was to push prices down.

IV

INFLATION, DEFLATION AND REFLATION

WRITERS who use the term inflation do not generally define its meaning at all precisely. The general idea which they suggest is "a too rapid increase in the volume of currency or bank-money", "a redundancy of currency", "a redundancy of bank-money", and so forth. But all definitions of this kind have an implicit reference to some hypothetical money situation that does not display "too rapid increase" or "redundancy"; and, until this hypothetical situation is exactly described, they remain ambiguous. It is, therefore, necessary to inquire what a money situation wholly free from inflation would be like; or, to put the question more concretely, what tests would need to be satisfied to convince us that inflation is absent or is present.

One possible use of the term would be in direct reference to prices. On the theory that, by contracting currency and bank-money sufficiently, it is always possible to prevent a rise of prices, and by expanding them sufficiently to prevent a fall of prices, we might say that currency and bank-money are inflated above

what they ought to be when general prices go up, and are deflated below what they ought to be when general prices—measured in accordance with some agreed convention—go down. But this use of terms, though it would have certain conveniences, involves a wide departure from what is customary. For nearly everybody, when he speaks of inflation, dimly thinks of something that is "the fault of money". But some movements of general prices are obviously "the fault of commodities", and to say that money is "inflated" when it has done nothing itself, but has merely failed to correct or cancel a change initiated elsewhere, would commonly be regarded as paradoxical. Inflation, therefore, must mean something other than a mere failure on the part of money to prevent prices from rising—in the event, for example, of a tremendous shortage of commodities. If this were not so, we should sometimes have to say that inflation was taking place even though the volume of money in existence was being rapidly contracted!

If we are to keep in touch with ordinary usage, we must not, I think, use the term inflation in that sense. A condition *sine qua non* of inflation taking place is that the quantity of money—bank-money or currency or both—is *expanded*. At the same time inflation is not, as ordinarily

used, an alternative name for expansion. In the upward swing of a normal trade cycle, even in the upward swing of activity in the holiday season, the quantity of money available to the public is always expanded. We do not call this inflation. All inflations in short are expansions, but not all expansions are inflations; just as a man's girth is expanded when he grows up from childhood and also when he drinks a barrel of beer, but it is inflated only in the second case. What expansions are then to be reckoned as inflations? In modern communities where bankers, if left to themselves, act in accordance with recognised rules and customs, we may perhaps distinguish between expansions which are, and expansions which are not, made possible by overt government interference with the banking and monetary machine. When the volume of bank-money expands under the direct influence of a boom in business confidence, all the ordinary legal safeguards of the banking and note-issue systems being maintained, there is no inflation, however great the expansion that occurs. Inflation is only present in so far as the expansion is made greater than it would otherwise be by some definite act of interference by Government with monetary and banking arrangements. This conception fits in fairly well with current notions, but it has to meet two serious difficulties.

The first is that the notion of governmental interference with monetary and banking arrangements is ambiguous. No doubt certain government acts are clearly not interference in this sense. This is true of government borrowing from the banks, when the borrowing takes place in the ordinary way of business and is unaccompanied by any expressed or implied political guarantees. No doubt, again, certain other government acts clearly are interference. The issue of £1 and 10s. Treasury notes during the War falls within this class. But between these two extremes there is a large tract of ambiguous territory. The Government, for example, borrows from the banks, or otherwise calls for their help, in carrying out its financial policy. When they respond to these demands this very fact creates a tacit understanding that, if, as a result of their complaisance, they find themselves in difficulties, the Government, whether by a further issue of Treasury notes or in some other way, will see them through. Yet, again, during the War, the Government, by commandeering American securities held in this country and using them to support the exchange, indirectly saved the Bank of England from being drained of gold, and so made it safe for it to sustain a much larger volume of deposits than it could otherwise have done. This was, of course,

stringent interference with private property. But was it interference with monetary and banking arrangements? And was it interference of that kind when the Government organised propaganda work designed to persuade people that to demand gold of the Bank of England in exchange for Treasury notes was "unpatriotic"? It is impossible to resolve these questions by means of any absolutely rigid principle.

The second difficulty arises out of the fact that banking law is a much more elastic affair in some countries than in others. For example, in the United Kingdom prior to 1928 the Bank of England might not issue notes on a fiduciary basis beyond a certain definite amount unless the Bank Charter Act was suspended. The suspension of that Act was a distinct piece of interference with the law. But in pre-War Belgium, where a law very similar to the Bank Charter Act was in existence, there was a clause which allowed the Finance Minister in certain conditions to suspend its operation. The Currency Act of 1928 introduced this arrangement into England. When he acts under that clause there is no interference with the law, though perhaps there may be said to be government interference with currency and banking. Yet, again, in pre-War Germany an expansion of note issue beyond the normal limit was permitted without any action

on the part of the Executive, on condition that certain specified rates of taxation were paid on the extra issues. It is impossible to speak of government interference in any sense here. This is sufficient to make plain the difficulty. If the definition of inflation is made to turn upon whether or not the banking and currency conditions that exist at any time have been brought about by government interference with currency and banking, it follows that exactly the same state of affairs will be inflation in one country but not in another; and that even in the same country what would be "inflation" to-day may, on account of a change of the law, no longer be inflation to-morrow. Obviously a definition that is subject to these vicissitudes leaves much to be desired.

In view of all this it seems as though the only really satisfactory way of defining inflation would be to make a schedule of the various sorts of action that, for the purposes of the definition, are to be regarded as government interference with currency and banking, and to call the fruits of them inflation. In that way we could give a precise meaning to the word. But I doubt that it would be worth while. At all events I shall not attempt it, but shall leave confessedly a certain mistiness about this fundamental term.

Though the precise boundaries of the concept

inflation are thus not fixed, within those boundaries there is between two kinds of inflation a clear-cut distinction. Or, if we like to think of inflation as a currency disease, there are two sharply distinguished courses which the disease may run. The critical question always is: Will the public take fright; will it come to mistrust the State money and try to hold other things instead of it; or will it regard the price rise as a temporary event from which recovery will presently take place? In the early stages of the great German inflation people's attitude was of the latter sort. There was no flight from the mark. On the contrary, many speculators bought it for the rise. The velocity of circulation diminished: prices rose less than in proportion to the growth in the quantity of money. But in the later stages of the inflation—with the enormous budgetary drain to finance passive resistance in the Ruhr—this attitude of mind was reversed. People became afraid of a collapse; they fled from the mark and declined to hold it. The velocity of circulation enormously increased. Prices rose much more than in proportion to the quantity of money. The disease was feeding on itself; had become cumulative. Galloping inflation had set in; a currency disease whose end is death. But it does not always happen that inflation passes into galloping in-

flation. That did not happen in France. The franc lost four-fifths of its value in terms of gold, but there was no stampede. Whether catastrophe happens or not depends in part upon the behaviour, and even upon the gestures, of politicians. Poincaré's personality was a buttress to the franc. But much more, of course, it depends upon the environment. It was the intolerable drain of financing the Ruhr, the apparent impossibility of unravelling in a hostile world the tangle of reparations, that broke the mark. The prophecies frequently made in August 1931 by members of the British Government that, if Great Britain were forced off gold, the £ would inevitably plunge as the mark had plunged and prices soar to unimagined heights, were, as later facts have shown, wholly without warrant.

So far of the meaning of Inflation. What of Deflation? Is this simply the opposite of Inflation? Broadly, I think, we may say that it is. We certainly do not ordinarily use the word to mean *any* contraction in the quantity of money, still less *any* fall in the level of prices. The sort of contraction that accompanies the downward movement of an ordinary trade cycle is not deflation. Deflation is present, however, when contraction results from a deliberate act of policy outside the normal course. It is true

that the act of policy in this case may, on occasions, be ascribed, as it can hardly be with inflation, to the initiative of the Central Bank rather than of the Government. But for practical purposes this is a distinction without a difference. On such a matter the Central Bank and the Government are almost sure to be at one. This has certainly been so in recent times in this country. Thus, in so far as the Bank of England maintained high discount rates prior to 1925 in order to bring the £ to parity with the dollar, the resultant contraction in the quantity of money was deflation: when, after the abandonment of the gold standard in 1931, it held the bank rate at 6 per cent to support the exchange, there was deflation. Some economists might be inclined to add that, in so far as the Government in the last two years has prevented local authorities from borrowing and spending money because this was supposed to be good for the £, there was deflation. But it is better, I think, to keep the term for policies that act upon the monetary situation directly, not by these roundabout means.

Having said this much about the meaning of these two words, let us ask next whether any broad statement can be made about the way in which the processes they are used to denote come about. For inflation the answer to this

is easy. In all important cases the root cause has been the same: heavy strain on the Government Budget; inability to secure by taxes or ordinary loans revenue enough to meet State expenditure; and consequent creation by the Central Bank of new credit on behalf of the State.[1] The spending of this new credit swells the balances of the other banks, and leads to increased lending by them. In general it has made necessary the provision of additional currency to enable them to encash claims presented to them; and this has meant the printing of more and more inconvertible notes. The prime mover in every case has been, not, as is sometimes loosely said, unbalanced budgets as such, but budgets unbalanced in conditions when the deficits could not be, or at all events were not, met by ordinary loans from the public, and so were filled up by new creations of money. This point is an important one. In a country where the government enjoys public confidence moderate budget deficits can succeed one another for a long time without an inflation

[1] As Mr. Hawtrey has pointed out, budget deficits could be financed by Treasury bills sold to the banks without evoking inflation, provided that other bank loans were so far restricted that no new credit creation by the Central Bank was required (*Trade Depressions and the Way out*, p. 138). In this case the public would not, indeed, be making new loans to the Government, but acquiescing in the banks lending to the Government instead of to them.

being started. They are always a danger signal, but, when the general situation is not unduly strained, they need not become more than that.

The way in which deflations, as I have defined them, are brought into being is equally easy to set out. A deflation can never be forced on a government against its will, as an inflation can be, by budget difficulties. A deflation will never be undertaken by a government or Central Bank for its own sake from a starting-point of stable conditions. I doubt if it will ever be undertaken, at all events in a democracy, in order simply to reverse a price rise: the bond-holders and so on, who will benefit, are not popular enough for that. Deflation, when it is adopted, has always been motived by the desire to restore some pre-existing parity between a country's money and either gold or, what is sometimes the same thing, other countries' moneys. After the Napōleonic wars and the suspension of specie payments our struggle was to restore sterling to its old parity with gold. So also in 1925. The French and Italians for many years after the war professed a like purpose, though, in their more difficult position, they never seriously tried to achieve it. There is no other motive that ever leads a government or Central Bank deliberately and knowingly to attempt deflation. The deflating activities

of the British Government, with its economy campaign, after September 1931, were certainly not deliberate. There was no intention to contract the stock of money and drive prices down. What was done was rather an accident of misunderstanding.

What I have been saying so far about inflation and deflation is preliminary. My main concern is not with either of these things, but with a third thing, reflation. When the general price level has fallen substantially from a former high point, a reflationist is a person who proposes, by monetary means, to raise it again to, or at all events some distance towards, that point. Thus reflation is a particular instance of inflation, inflation undertaken on certain particular occasions, with a specific intention and subject to a predetermined limit. For inflation and deflation my discussion has gone little beyond definition. For this narrower and more recent concept reflation I shall attempt something more—a tentative consideration of it from the standpoint of social betterment.

A natural first step is to set out explicitly the principal evils with which heavy falls in the general price level are associated. There are four of these. First, on many occasions, these price falls, because money wages are sticky, are not associated with corresponding wage

falls. This means that production costs rise relatively to selling prices, and, unless beforehand there was a great labour shortage, this carries with it heavy unemployment. Secondly, private debtors at fixed money interest find themselves confronted with much larger obligations, both for interest and capital, in real terms—farmers, for instance, in terms of their products—than they reckoned on when these debts were incurred. No doubt, so far as the debts are due inside the country, the worsened position of debtors has an arithmetical set-off in a correspondingly improved position of creditors. But this does not mean that no damage is done. Not only are legitimate expectations greatly disturbed; it may well happen that serious disorganisation through foreclosures and bankruptcies takes place. Thirdly, for countries whose governments or citizens are under obligation, whether for reparations or for interest and sinking fund on loans, to make payments abroad in terms of the appreciated money, the burden of real transfer that has to be made to foreigners will be enhanced. This, from the standpoint of the nation as a whole, is a graver matter than the enhancement of the real value of debts due inside itself. Fourthly, the obligations of the Government to holders of War Loan Stock and to claimants for pensions are fixed in terms of the national

money and, for the most part, are not susceptible to immediate conversion. Hence the Government is forced to collect as revenue a much larger proportion of the money income of its citizens than it has been accustomed to do hitherto. The technical task of financing the national budget is thus rendered more formidable.

These, as I say, are the main evils associated with large falls in the general price level. But, the moment one has set them out, it becomes apparent that not all falls in the general price level carry with them these evils. Price falls due to improvements in industrial and agricultural technique do not do this. When these occur, money wages can be maintained without setting up any disequilibrium between selling prices and production costs, and without, therefore, damaging employment: and, though, no doubt, the real burden of private and government debts contracted in terms of money are increased, the debtors' real incomes are increased correspondingly, so that they are no worse off than before. But it is not only general price falls due to advancing technique that are *prima facie* harmless. The same thing is true of price falls that merely restore to a proper level prices that have temporarily become too high. Of course "proper level" and "too high" are vague terms.

But the intention is easy to make clear. The essential feature of any price situation is, not the absolute level of prices, but the relation between prices and money costs—more roughly between prices and money wages. For it is on this that the state of employment and unemployment depends. We may picture to ourselves, if we will, a sort of standard relation, in reference to which price falls are judged. In a world where labour was absolutely mobile this standard relation would be one in respect of which there was, on the one hand no unemployment, on the other hand no unfilled vacancies. But in the actual world mobility is not perfect. Unemployment or unfilled vacancies, or both together, always exist in some degree in consequence of *relative* fluctuations as between different industries and places. The standard relation between prices and money wages must be conceived as one in respect of which there is no unemployment and no unfilled vacancies beyond what is due to these relative fluctuations. This implies that the number of unemployed men and the number of unfilled vacancies are equal to one another. When the number of unemployed men either exceeds or falls short of the number of unfilled vacancies, the actual relation is out of gear with the standard relation. If the number of unemployed men is in excess, prices are too

low relatively to money wages; if the number of unfilled vacancies is in excess, they are too high. When, in this sense, they are too high—which, in effect, means near the peak of a boom—some degree of price fall can take place without any serious evil consequences. I conclude then that, with price falls due to technical advance and with price falls that merely cancel out the excesses of a boom, there is no *prima facie* case for reflation.

And this is not all. Suppose that we have a heavy price fall neither due to technical advance nor to the mere cancelling of a boom. Even so in some circumstances there is no *prima facie* case. The price fall, indeed, is then bound to have done serious damage; and there *was* a *prima facie* case for preventing it, if we could, before it took place. But it is one thing to prevent Humpty-dumpty from falling off a wall, a different thing to replace him after he has fallen. For deciding whether or not we should try to do that it is vital to know for how long a time he has lain upon the ground; how soon after a price collapse reflation can get to work. The case for reflating action, when there is a case, rests mainly upon the fact that the actual relation between prices and costs does not agree with what I have called the standard relation; more broadly, that money wages, money debts

and government obligations have not been adjusted to the price movement. Obviously if all these things had been completely adjusted, no case for reflation would exist. Hence that case is, in the nature of things, a "wasting asset". The longer the low price level is allowed to continue, the more fully adjustment to it is likely to be made. Under the pressure of unemployment money wage rates will slowly be forced down. Debtors will default or make composition with their creditors, governments, so far as they can, will convert their loans to lower interest rates and modify the rates of payment made to unemployed men, pensioners and so on. The process will be bitter and painful, but by degrees it will be carried forward. Obviously, the further forward it has been carried, the weaker the case for reflation. In this respect reflation is in very similar case to a capital levy to wipe out war debt. Immediately after the war there was a great deal to be said for that plan: but rapidly with lapse of time the case for it worsened. It is the same with reflation. If attempts to introduce it were successfully resisted for thirty years—by the end of which time statesmen might have come to understand the arguments in its favour—those arguments would have been nullified by the facts. The maladjustment it is designed to correct would no longer be there. The patient

would have endured the suffering of his illness. If he had not died, he would have recovered. Reflation is then essentially a quick-action remedy. If it is not taken, adjustments involving great distress and suffering will have to be made. The purpose of the remedy is to render these adjustments unnecessary. To wait till after they have been made and then to administer it is mere futility. No doubt even then somebody may wish to push prices up. But, if he does, what he is advocating is not reflation. With that, if 'twere done 'twere well 'twere done quickly. If it is not done quickly, lapse of time will make it useless, and worse than useless, to do it at all.

What I have said should, I think, have made it clear that the occasions on which there is a *prima facie* case for reflation after a heavy fall in prices are narrowly circumscribed. The price fall must be due to something other than technical advance; it must not be the mere cancelling of an extreme boom; it must have occurred recently, so that there has not been time for adjustment to be made to it. In these conditions, and these only, reflation is *prima facie* desirable. But is it even then actually desirable; does the *prima facie* case turn out on examination to be a proved case? I suggest that this question cannot be discussed satisfactorily unless a distinction, in analysis quite sharp, but in practice very far

from sharp, is drawn and firmly held. Prices may be conceived as moving in a series of cycles about a centre which itself may move. If low prices are simply incidents in the cyclical movement, they will, we may presume, presently return, so to speak, of their own accord, more or less to the level from which they fell. But, if the centre has been itself forced down by, for example, a contraction in the stock of gold or of government notes, on which a country's money is based, there is no presumption that this will happen. These two situations present entirely different problems.

Consider first what I have roughly called a cyclical movement. Suppose that a collapse of prices has come about in consequence of a falling-off in the prospects, as seen by industrialists, of capital investment. This may happen either because the openings for some important form of investment, the development of a railway system, for example, have been filled up; or of a decline in what is vaguely called business confidence, not based on any clear-cut change in objective conditions. In a world entirely devoid of friction, if people decided to make less capital goods, the main part of the resources thus set free would not become unemployed, but would be turned to making consumption goods. The peasants having finished their building of barns,

would go back to tilling the fields. But in the actual world of modern industry things do not work out like this, partly because workpeople cannot move easily from one industry to another, but mainly because contractions in the amount of money that is being invested do not automatically lead to equivalent expansions in the amount that is being devoted to purchasing consumption goods. On account of that the total amount of money that is being expended, not merely the amount which is being expended on new capital goods, falls off. This means that, unless prices are reduced on the average in proportion to the cut, there is not enough expenditure to carry off the former volume of production; unless money wages are reduced in this proportion, there is not enough expenditure to sustain the old volume of employment. This suggests a paradox. While it is commonly held that in depressions unemployment rules because prices have fallen, would it not be truer to say that it rules because prices have not fallen enough: since in order to allow the old volume of output to be consumed they would need to fall more? But this, of course, is only a half-truth. The reason is that prices are tied to money wages. If prices and money wages both fell in proportion to expenditure, full employment could be maintained. But against reductions

money wages are notoriously very sticky. They do not fall themselves, and, by not falling, they limit the fall in prices. A correct statement of what is happening would run something like this. A falling-off of investment has entailed a reduction in aggregate money expenditure. This has led to a reduction in the quantity of goods purchased and in the quantity of labour employed. Had the associated falls of prices and of money wages been large enough, these reductions would not have happened. But money wages have not fallen enough and, consequently, money prices have not fallen enough either. The source of the evil is, not the price fall itself, but the cut in aggregate expenditure not balanced by a sufficient price and wage fall. But, though the price fall is not the essential cause, it is, none the less, a very good *index* of what is happening, because, in general, a large price fall implies that there has been a large cut in aggregate expenditure—a cut that is certain not to have been perfectly compensated. In this sort of situation price falls are incidents of fluctuation. Remedial action, therefore, if it is attempted, must be directed, not towards any long-range change in the price level, but towards reducing as far as may be the amplitude of fluctuations. The orders for work by public authorities should be dovetailed into the depressions of private industry;

the Central Bank should stand ready to raise discount rates substantially in the early days of a threatened boom, to lower them substantially in the early days of a threatened depression. These are familiar theses. There is no call here for anything that would ordinarily be named reflation.

But the other kind of price fall, when the centre about which the price cycle revolves has itself been driven down, is a quite different thing. Here there is no question of a fluctuation that in the normal course may be expected to correct itself. The centre of the price system has fallen, and in falling has called into being the evil consequences that I described earlier in this
309 lecture. These consequences can be done away either by a restoration of the price level or, the price level not being restored, by money rates of wages and other money contracts being adjusted to the new and lower level. Should the State, by some drastic step like President Roosevelt's devaluation of the dollar, deliberately lift the price level up again? The issue of reflation is there squarely posed.

Let me begin by setting out the two chief arguments against it. The first is this. Reflation, it is said, would be all very well if we could be sure that, when it had cancelled out the price fall against which it was aimed, the process would be

stopped and stabilisation secured. But there is grave danger that this will prove impossible; that the reflation will get out of hand; that a rash use of morphia to relieve temporary pain will turn the patient into an incurable drug addict. This objection has two aspects, the economic aspect and the political aspect. So far as the economic aspect goes what I said earlier about the distinction between an ordinary inflation and a galloping inflation covers, I think, the ground. If France was able to cut down the value of the franc by four-fifths without bringing on a currency collapse, there is no reason whatever why the United States, if it chooses, should not be able to cut the dollar in half. The political aspect is different. If anybody urges that the United States Senate or the British Parliament, or any other political authority, having once tasted the drug reflation, would lose all self-control and insist on an endless series of further money debasements, there is nothing for an academic person to say. That is a question for "that insidious and crafty animal"—the libel is not mine, but Adam Smith's—"vulgarly called a statesman or politician".

Pass to the second argument. If it were possible to reflate by adding directly to everybody's holding of money in the desired proportion, once more reflation would be all very well. But

in practice it is not possible to reflate on this plan. The extra money can only be put into circulation by the banks, through an offer of low interest rates, inducing business men to borrow it and employ it in their businesses; in other words by their effecting a forced levy of purchasing power from the general public and handing this over to persons who will use it to finance the making of capital goods. This—the only practicable—method of reflation entails an increase in the *proportion* of the country's productive resources that is turned to capital as against consumption purposes. So long as the creation of new money continues the enhanced proportion can be maintained. But, when the price level that is being aimed at is attained, the creation of new money must stop. In any event it could not continue indefinitely on pain of starting a galloping inflation. So soon as the creation of new money stops, forced levies are no longer being made for business men to invest. Unless, therefore, meanwhile the general public has altered its attitude towards investment and become willing, without forcing, to invest as large a proportion of its income as it has recently, by forcing, been led to do, the proportion of productive resources turned annually to capital uses must fall back again to what it was originally. Nor is this all. Since during the period of forcing

the stock of capital has been increased, the openings for further investment have been cut down. Hence the proportion turned to capital uses will fall, not merely to, but actually below what it was before. It is thus impossible for reflation simply to push up the general price level. There is bound, as a secondary effect, to be set up an oscillating movement in the proportion in which productive resources are engaged respectively in capital-making industries and in industries that make consumption goods. Since friction prevents complete adjustment to these oscillations from being made, some damage—it may well be substantial damage—must result.

But this does not decide the practical issue. The fact that reflationist action carries with it secondary ill consequences would be decisive against it if it were open to us, as an alternative, to introduce forthwith the required adjustments in wage and other contracts. But that is not in our power. On every occasion when practical choice must be made we shall be confronted with a structure of wage and contract arrangements by no means plastic to our hand. On different occasions and in different countries the degree of rigidity of this structure, and so the promptitude and effectiveness with which the requisite adjustments can be made, may be different. It is im-

possible, therefore, to say in general terms either that the reflation method is better than the other or that it is worse than the other. On each occasion opposing details—in a hazy atmosphere of imperfect knowledge—must be studied and balanced. Nor does this exhaust our difficulties. To accept reflation in any depression because the structure of money wages and contracts is rigid, tends in some degree—in what degree we cannot say—to encourage and to sustain rigidity in that structure in future depressions. Thus in the long run reflation may itself, in a measure, create the situation which it attempts imperfectly to palliate, much as indiscriminate charity in part creates the poverty it relieves. In weighing up issues so complex there is wide room for differences of opinion.

Even this is not all. So far I have tacitly assumed that price falls due to downward cyclical fluctuations and those due to a collapse of the centre about which fluctuation take place always arrive separately. But, of course, that is not so. The two sorts of price falls may well be combined together, and, even if they are not combined, at the time when any particular price fall is occurring it may be impossible to decide to which type it belongs. Ignorance here adds greatly to the difficulty of practical decision. To the cautious minded it is

an argument against reflation—when in doubt stand still. To the adventurous it is an argument in favour of it—when in doubt hit something. To which of these two parties we shall on any particular occasion belong depends upon our temperament. There is, for such an issue, no economic calculus, to whose objective judgment candid inquirers must all perforce submit.

V

STATE ACTION AND LAISSER-FAIRE

IN this lecture I shall speak in a very general way about the attitude of economists towards State action; the broad problem of what sort of economic action government ought to take. Now in economics proper the word *ought* has no place. Its business is to study what *tends* to happen, to trace the connection between causes and effects, to analyse the interplay of conflicting forces. It is a positive science, not a normative science. It is concerned, like physiology, to discover what effects various drugs will produce, not, like medicine, to prescribe what drugs ought to be taken. So soon as an economist begins to prescribe remedies and palliatives for social evils he is quitting the narrow boundaries of his science. He must necessarily base himself in part upon judgments about what is good and what is bad, what is better and what is worse, thus trespassing on the domain of ethics; and he must frequently take into consideration the reactions which particular proposed remedies may be expected to bring about outside the economic sphere—on such things for instance

as the integrity of political life, the social relations between employers and workpeople, and so on. Even though, in the field of their economic specialism, two people see eye to eye, they may differ on these other matters. They may thus arrive at different conclusions as to the wisdom, for example, of a policy of inter-Empire preference or a policy of internal price stabilisation. Such differences among economists in practical conclusions are likely to be much more frequent and much wider than any differences that there may be among them touching the subject matter of economics itself.

But there is another reason for differences of opinion over and above the fact that the decision of practical issues involves judgments on other than purely economic questions. As I said in the first of these lectures, in a very vital matter our science is still in a primitive stage. Economics can accomplish successfully *qualitative* analysis, but seldom *quantitative* analysis. Now it often happens that a particular proposal involves a number of different economic effects, some of which we may think good and others bad. People who took similar views on goodness and badness might be expected to agree about the wisdom or unwisdom of the proposal, if the sizes of the different sorts of effects could be definitely ascertained. As things are, however,

this cannot usually be done; and the vague judgments which different economists form are almost certain to diverge. In this matter it may be hoped that we shall gradually achieve some advance. But the way is long and difficult. For many years yet, even on the purely economic aspect of practical affairs, more or less instructed guess-work will be the best we can attain.

I have called the subject matter of this lecture *State Action and Laisser-faire*. It would have been snappier to call it *State Action* versus *Laisser-faire*. But the very first thing I have to say is that any sharp antithesis of that kind is unreal and misleading. No defender of so-called laisser-faire desires that the State should do absolutely nothing in matters relevant to economic life. The most ardent believer in the economic harmonies, that are supposed to flow from the unimpeded pursuit by individuals of their private interests, agrees that these harmonies will not emerge unless robbery at arms is restrained by law, fraud repressed, and contracts which have been formally accepted enforced. As Professor Cannan has well said: "The working of self-interest is generally beneficial, not because of some natural coincidence between the self-interest of each and the good of all, but because human institutions are

arranged so as to compel self-interest to work in directions in which it will be beneficial". The broad scheme of institutions as developed in Western States, the institution of the family, of private property (within limits), of contract, of police, of laws designed to enforce commercial honesty and so forth is usually taken for granted by both sides in controversies about State interference in economic affairs. Strictly, therefore, there is not, as is popularly supposed, a sharp issue between a *principle* of laisser-faire and a *principle* of State action. That the State must act in very important ways is universally agreed. The real question is not whether the State should act or not, but on what principles, in what degree and over what departments of economic life its action should be carried on. The issue is not one of yes or no, but of more or less; of delimiting an uncertain frontier; of weighing, in different departments, conflicting advantages, the balance of which sometimes tips to one side, sometimes to the other.

So much for general background. The next point to be made—and it is a fundamental one—is this. Decisions about State action, as indeed decisions about any action, involve two things: a choice of the goal to be aimed at and a choice of the way towards it. Professor Gregory has put this very well. "Economic planning", he

writes, "involves something more than the mere adjustment of means to ends; it involves also the conscious choice of ends". When the end is given and precisely known, the task of finding the best means towards it, though it may be practically difficult, is at least clear cut. In the Great War there was general agreement that immense quantities of shells and guns must be turned out in the least possible time. This could be planned for. At the present time it is generally agreed that the number of houses adapted to the needs of poor persons is much below what it ought to be. This too can be planned for. But, when people speak in general terms about a planned economy as a whole, as against an unplanned economy as a whole, we are in an entirely different region of ideas. To what end is the planning to be directed? Do we seek national power or the happiness of individual citizens? Do we want to be a self-sufficing community or a more or less specialised part of a world system? Do we want a large population or a small one? Do we prefer an immense equipment of material means for producing commodities or a high degree of mental training to enjoy them? Such questions are anything but precise. They are almost ludicrously vague and loose. Practically nobody asks them. Of the few who do it is most unlikely that their

answers will agree. But, until some sort of answer is given and accepted, advocates of a general State-planned economy are building a castle of words.

But because a planned economy is an empty phrase, it by no means follows that State planning is not worth discussing. On the contrary a practical statesman, starting from things as they are, though he will not, except in election speeches, propose "to scrap the lot" and build a new world out of his head, will continually try to plan particular step-by-step improvements. With the existing structure of society and the existing part played by the State as groundwork, he will ask himself whether Government might not with advantage use its power to abolish some evil things here, to build some good things there. This may seem an unheroic procedure. With this sorry scheme of things the poetical way is to

> shatter it to bits and then
> Remould it nearer to the heart's desire.

That way some nations have pursued—at an appalling cost in human misery. But it is not a way that fits into English traditions: and, after all, it is in State action in England that we here are chiefly interested.

But at this point there is a further very im-

portant distinction to be drawn. The existing economic system involves evils and wastes of two sorts: first, those which arise because private persons pursue incompetently the ends that they set before themselves; secondly, those which arise because the ends that they set before themselves are in part discordant with the ends of the community. For example, on the one hand, a farmer or manufacturer, who is trying to produce and sell sorts of goods that people want with a view to normal profit, may miscalculate their wants and produce the wrong things. On the other hand, he may make no miscalculation, but may exercise monopoly power, restrict supply and make a gain for himself at a more than corresponding cost to other people. The argument for State action is quite different in these two cases. Of recent years a large part of the popular advocacy of planning has been directed to the first kind. Private industry is said to have broken down; to have been misdirected, to be badly organised, and so on: and the State is called upon to intervene to correct the failure of individuals to manage their own business intelligently. Now I do not ask here how far the failures of private enterprise in recent years have been due to the failure of States and of Central Banks, which are close allies of States, to manage effectively national money systems, how

far in fact the failure of private enterprise has been a secondary effect of failure in this public enterprise. The issue goes deeper than that. In so far as private enterprise has failed, not because it is directed to anti-social ends, but because those in charge of it have made mistakes and have forecast the future wrongly, the case for State action rests, and can only rest, upon the assumption that State officers, or the officials of one or another type of Public Board, will do the work more efficiently. In an article I read recently the writer contemplated a dog who sees his master bicycling and is anxious to join him. The dog, not knowing where his master is going, makes at any moment directly for the place where at the moment he is. Consequently his pursuit in general follows a curve, and, before his object is achieved, he has made a much longer journey than he need have done. Had the dog sat down and calculated his master's route beforehand, he would not have wasted energy. This was intended to be an argument for State planning. But it is no argument unless we have reason to believe that public servants are better qualified to anticipate consumers' wants than the heads of private businesses and joint stock companies. It is easy for a public servant, looking back when he knows the course that demand has taken, to point out the mis-

takes of those who tried to forecast it. But it is a very different thing for that public servant to make the forecast. The fundamental assumption, on which the whole case for this sort of planning rests, is that public servants will prove specially skilled at this. That assumption is at least a doubtful one.

With the other sort of failure and waste under private enterprise the case is quite different. If private enterprise is pursuing ends incompatible with the public interest, there is no need, in order to justify acts of intervention, to assume that public authorities are more competent than business men. The only persons who will be opposed *in principle* to State action on this ground will be those who believe that private interest and the public interest are *never* incompatible; that the structure of law and institutions is now so perfect that in the environment they have created the free play of economic motives always promotes the best interests of the community as a whole. But the doctrine of the invisible hand evolving social benefit out of private selfishness has never been held by economists—certainly it was not held by Adam Smith—in that absolute and rigid form in which popular writers conceive it. All are agreed that many times the hand falters and fails of its aim. This fact justifies State planning in principle.

There need be no quarrel about that. But what planning? To settle this, the first business of a State planner is to make clear to his own mind what the most important disharmonies are. Here economic analysis, though it cannot help with detailed counsel, is competent to offer some broad suggestions.

First, in general, when conditions are such that the producers of any article are able to form a monopoly, their pursuit of their private interest will not promote the public interest. It will pay them to contract production to a smaller volume and to charge higher prices than it is desirable in the joint interests of themselves and their customers—that is to say of the whole community including themselves—that they should do. This discord among the economic harmonies is well understood. Obviously its existence creates a *prima facie* case for State intervention, whether by way of public control over the conduct of combinations whose range confers on them monopoly powers or, in some circumstances, by direct State or municipal operation of services, which might be expected in the normal course to fall into the hands of private monopolists.

In this field there has in recent times been evolved a device which is coming to play continually a more and more important role

—the device of Public Service Boards and Commissions, not Departments of Government, through which it is sought, in some cases actually to manage, in others to exercise supervising control on behalf of the public. In none of the most recent arrangements for State action in industry has the model of the Post Office been employed. It has been felt that the deadening effect of red tape and the risk of politically motived action can both best be avoided by a different form of organisation. A good example from pre-War times is afforded by the Port of London Authority. This body was created as a body corporate by Act of Parliament in 1908. It consists of 18 elected members, representing payers of dues, wharfingers and owners of river craft, and 10 appointed members, among whom the Admiralty and Trinity House each appoint 1, the Board of Trade 2, and the London County Council 4. The chairman and vice-chairman are appointed by the Port Authority itself, which is thus a completely autonomous body. Since the War an imposing list of institutions fashioned on the same general lines has grown up. Captain Macmillan in his book on *Reconstruction* gives a convenient list of them. They include the Forestry Commission (1919), the Electrical Commission (1920), the Central Electricity Board (1927), the British Broadcasting

Corporation (1927), the Traffic Commissioners (1931), the Coal Mines Reorganisation Commission (1931), the London Passenger Transport Board (1933), and a whole series of Marketing Boards for Hops, Milk, Pigs and Bacon.

Secondly, it sometimes happens that only a portion of the benefit or damage due to a person's private action is reflected in the reward that that person receives; and, consequently, that he tends to carry that action less far or further than the general interest of society requires. For example, when a man under competitive conditions invests money in a concern for manufacturing and selling alcoholic drinks, it pays him to carry his investment up to the point at which the cost of providing the last unit of service balances the price that consumers are ready to pay. But as an indirect consequence of his action the Government is forced to expend more money on the police force than it would otherwise need to do. From the social point of view this is a part of the cost of his undertaking; but, since he does not pay for the extra police, from his private point of view it is not part of it. The social cost of his investment, at the margin, being thus greater than the private cost, it is not in the social interest that it should be carried so far as the unfettered pursuit of private interest tends to carry it. Again, if a

person is interested in breeding rabbits, he will invest in these creatures up to the point at which marginal cost to him balances marginal return: but he will (except in so far as he is a philanthropist) ignore the damage that they do to his neighbours' crops when they accidentally escape into their fields. From the point of view of him and his neighbours combined, this investment ought not to be carried so far as it pays him personally to carry it. On the other side there are certain sorts of investment that, at the margin, yield a return to other people in excess of what is reflected in the reward of the investor. The introduction of devices to prevent one's factory chimney from smoking reduces the washing bills of one's neighbours. Investment designed to promote mechanical improvements and fundamental scientific discoveries often yields a return to the world, which, even when rights in the new ideas are temporally reserved by patents, enormously exceeds the private return to the investor. It is in the social interest that investments of this class should be pushed further than the unfettered pursuit of private interest will tend to push them. Plainly as regards both the above two classes of investment there is a *prima facie* case for State intervention, in the first class by restriction, in the second by stimulation. The fiscal weapons of

bounty and tax, if the Government could be trusted to use them rightly, might here carve out a social gain.

Thirdly, there is a peculiar kind of disharmony due partly to the fact that people's telescopic faculty is imperfect, so that they do not attach the same importance to a given satisfaction, even though it is absolutely certain, that will occur in the future as they do to an equal satisfaction occurring now, and partly to the fact that the duration of human life is limited. From a perfectly general point of view a given satisfaction is equally valuable no matter when, and, subject perhaps to certain doubts and qualifications, no matter to whom it occurs. Consequently, all discounting of future satisfactions, which cuts down the volume of investment, is hostile to the interest of the community in the widest sense, when this is conceived as including future generations as well as the present generation. This disharmony is especially important in countries that possess natural resources of limited extent and subject to exhaustion, such as coal, oil, forests or inherent fertility of virgin soil. There is a danger that the self-interest of one generation may cause them to deplete these resources to satisfy trivial needs, with the result that future generations will be unable to call on them even for

urgent needs. There is a clear *prima facie* case for State intervention to prevent this.

The three sorts of disharmony that I have described so far we may speak of, if we will, as disharmonies of production. There is also an important disharmony of distribution. *Prima facie* all large inequalities of income entail social loss; for the ninth course of the plutocrat's dinner, despite the indirect benefit that it may confer on his doctor, yields much less satisfaction on the whole than the milk which the cost of it might have secured for a poor man's child. In making distribution more even there is a wide field for State planning; and in this field, of course, a great deal has been done. In England and Wales what is generally called social service expenditure, namely, expenditure on Old Age Pensions, War Pensions, Unemployment Insurance, Public Health, Housing and Education, amounted altogether in 1933 to £483 million, of which some £350 million came out of taxes and rates. Of the £350 million it is fair to presume that the main part is taken from relatively well-to-do persons for the benefit of these less well-to-do. Here the State planner has the good wishes of all humane men. But, none the less, he must always be on his guard. He must not, in his eagerness to improve the distribution of income, so act as

to dry up the sources from which it is produced. This is a very old problem. Economists to-day are, I think, agreed that taxes on the rich for the benefit of the poor can be pushed much further than their predecessors supposed without serious damage to production.

The disharmony of distribution, of which I have just been speaking, is of very wide range. A more special and limited disharmony is sometimes found in the wage bargains between employers and those workpeople who are not organised into unions. Here employers are strategically very strong. In general they have large reserves, and each employer stands over against a considerable number of men. If all relevant facts about the labour market were accessible to every workman, and if every workman was free to move on the instant and without cost from any one place to any other, this would not greatly matter. Wage-rates would be fixed by general market conditions and there would be no scope for individual bargaining. But in actual life there is usually a certain range of indeterminateness within which the wage-rate may be moved up or down by such bargaining. Within this range the employers' superior strategic strength enables them, as against unorganised workpeople, to push rates below the real worth to them of the workpeople's services.

If and in so far as they do this, they set in motion a train of actions and reactions that has very injurious social results. The workpeople, beaten in the first round of the bargaining contest, are by that very fact weakened for the second round. For, in consequence of lowered earnings, their efficiency as workpeople is diminished, so that, even if they obtained now the full worth of their work, that worth would be less than it used to be. This process is cumulative and threatens a progressive degradation of the standard and quality of the people subjected to it. When, therefore, they are not able, by organisation, to protect themselves, there is a strong *prima facie* case for State intervention in their defence. Hence Trade Boards.

Besides disharmonies of production and of distribution there are also a number of disharmonies connected with industrial fluctuations. The interest of the community as a whole in bad times requires manufacturers to make more largely for stock, and purchasers to order goods more largely than their personal interest leads them to do. Further—and this is much more important—it requires the banks to restrict credit more in good times and to expand it more in bad times than bank shareholders, looking to their private profit, desire. It has been realised by economists for a long time past that there are

serious disharmonies here, and that State intervention, operating through the currency and directed to make the general level of prices more steady than it is, would, *if it could be successfully introduced*, sweep many of them away. This is a large matter. In my earlier lectures I have in effect discussed some aspects of it. I will not, therefore, say more about it now, but pass to the next step of my general argument.

When private self-interest, acting freely, subject only to the ordinary forms of law, does not lead to the best results from a general social point of view, there is, as I have indicated, a *prima facie* case for State action. But this only takes us a little way. In order to decide whether or not State action is practically desirable, it is not enough to know that a form and degree of it can be conceived, which, if carried through effectively, would benefit the community. We have further to inquire how far, in the particular country in which we are interested and the particular time that concerns us, the government is qualified to select the right form and degree of State action and to carry it through effectively. A very important factor in this decision is the attitude of the people of the country towards government action. The patriotic enthusiasm engendered by a popular war may enable kinds and amount of control to work successfully that

in normal times would break down altogether. Again, alike in war and peace, one social group may be better adapted to an authoritative régime, another to a régime of free enterprise. Yet again at different periods different forms of industrial technique will be dominant, and these different forms may be associated with different degrees of popular acquiescence in government interference. A second very important factor in decisions about State action is the quality of the body that would be called upon to act, the intellectual competence of the persons who constitute it, the efficacy of the organisation through which their decisions are executed, their personal integrity in the face of bribery and blackmail, their freedom from domination by a privileged class, their ability to resist the pressure of powerful interests or of uninstructed opinion. This is a vital matter. Adam Smith's belief in laisser-faire—so far as he was a believer in it—rested much less upon a theoretical view that, if you leave things alone, they are almost bound to work out right, than upon practical experience that, if you interfere in the sort of way in which governing authorities, as he knew them in his day, did interfere, they are almost bound to work out wrong. But this class of consideration is evidently not one that will have the same application at different times and places. Let us,

therefore, look for a moment at the status of our own governing authorities now.

One thing at least is immediately clear. These governing authorities are enormously better equipped for successful action than they were in the days of Adam Smith or in the later days of Bentham. As Marshall has well said, during the last century in England "there has been a vast increase in the probity, the strength, the unselfishness and the resources of Government . . . and the people are now able to rule their rulers and to check class abuse of power and privilege, in a way which was impossible before the days of general education and a great surplus of energy over that required for earning a living". The British Civil Service is an institution of high capacity and unquestioned public spirit; and the politicians who constitute the Government for which this service works—whatever else we may think about them—are never in this country personally corrupt. But these politicians are subject to great pressure from persons who can control votes. Log-rolling and lobbying are powerful forces in any democratic country, and, when government policy touches private business, they are certain to be called in play. As a result, State action, which, it may be, is really needed in the interest of the weak, is most likely to be invoked successfully by the strong.

This, and not any abstract plea for laisser-faire in matters of trade, is the principal argument against attempting to divert the national energy by State action along lines other than those which it tends of itself to follow. Whatever kind of action we are contemplating, considerations of this class are relevant. For different kinds of action their importance is different: sometimes it is trifling, sometimes dominant. The invention of Public Service Boards and Commissions, not directly subject to political control, of which I spoke earlier, has greatly widened the range of what is practicable.

Thus from two sides we are brought to one conclusion. Inquiring how far the free play of private self-interest makes for social advantage, we find that it frequently fails to do this, but that there are many different forms and many different degrees in its failure. Inquiring how far Government is fitted to take action against these failures, we find that its fitness to do this varies, not only in different places and different times, but also as between interventions directed against different kinds of failure. The moral is plain. The issue about which popular writers argue—the principle of laisser-faire *versus* the principle of State action—is not an issue at all. There is no principle involved on either side. Each particular case must be considered on its

merits in all the detail of its concrete circumstance. High-sounding generalisations on these matters are irrelevant fireworks. They may have a place in political perorations, but they have none in real life. Accumulation of evidence, the balancing of probabilities, judgment of men, by these alone practical problems in this region can be successfully attacked.

VI

THE ECONOMICS OF RESTRICTIONS

DURING the past decade the idea of restriction has won from the idea of freedom a large territory. Attempts to gain world advantage, or national advantage, or advantage for particular groups of producers by not doing something or not allowing something to be done are now much more familiar, at all events, in this country than they were during the last half of the nineteenth century. I propose in this lecture to discuss the significance of this now dominant idea.

To anyone trying to take a wide view the first thing that suggests itself is this. Throughout the realm of living things until one comes to man restriction is never found. Life goes forward with a reckless urge, not to restrict, but to expand. One species competes with another species, one member of the same species competes with another; trees and plants with innumerable seed; fish with myriads of eggs; animals, less prolific indeed, but quite prolific enough; elephants and lions innocent as Adam himself of the theory and practice of birth control. Restriction—for, of course, re-

striction in the sense of limitation there always is and must be—is a secondary effect of struggle. Voluntary and deliberate restriction is utterly unknown.

One might perhaps suggest as an explanation of this difference between man and other living things that there is room for restriction only in connection with exchange, and that no living things other than man engage in exchange. But neither half of this statement is exactly true. It is not only among men that exchange takes place. Bees exchange their services in conveying pollen from male to female flowers against honey provided by the flowers. The rhinoceros, I am told, carries on his shoulders small birds, which provide him with information in exchange for large supplies of what, in the rhinoceros, correspond to fleas. Perhaps we should not make too much of these animal exchanges: though you may note that neither party to them ever dreams of bettering himself by cutting down supplies. The other lapse from accuracy in the statement that I made just now is more important. It is not true that there is only room for restriction in connection with exchange. It may be found outside exchange altogether; for example, among men, in the important matter of population.

Now a rhetorician, if he disliked restriction,

might convince himself and, less probably, his audience, that the non-existence of restricting practices among living things other than man constitutes some sort of ethical argument against them. They are, he might say, "unnatural", and therefore, with one of those magnificent logical leaps proper to perorations—and therefore wrong! This, of course, is mere verbiage. Elephants and lions do not deliver lectures—or attend them. This room with its electric light and, may I say, uncomfortable seats is, from their point of view, most unnatural. But, on whatever other grounds we may regret our present occupation, we need not on this ground feel any twinges of conscience. The truth is that issues about the merits or otherwise of restriction cannot be settled either by reference to what is natural, or, indeed, by any other *a priori* consideration. There are a great number of different kinds of restriction, introduced for a great number of different purposes. There is no escaping the pedestrian task of distinguishing among them and examining the different kinds separately. There are, of course, many ways in which a division could be made. It is a matter of choice and convenience what kinds we shall discuss and how we shall group them. I select two kinds that lie inside the territory of exchange and one that lies outside it. The two kinds are, first,

restrictions imposed, whether by themselves or with State encouragement, upon the output of particular groups of producers inside a country; secondly, restrictions imposed by the State upon trading between its citizens and foreigners. The third kind consists of mutual agreements among national States to restrict their armaments.

Now no decision can be reached about the goodness or badness, the desirableness or the reverse, of any of these several sorts of restriction, unless we are agreed upon some test by which to judge them. What test? Something to do with their effects upon the state of consciousness of sentient beings; in some sense, on satisfactions? But, granted that, and allowing that it can be given an unambiguous meaning—a doubtful point—*whose* satisfactions are to be taken into account? If it is a question of restricting human population, is it relevant to know whether lions and elephants, or cockroaches and flies, or bananas and tulips will be pleased? Bananas and tulips, perhaps, we may rule out by asserting—without conclusive proof—that they cannot feel; as anglers, charged with cruelty, always assert that fish cannot feel. But it is difficult on that ticket to rule our lions and elephants. On what ground can we defend a complete ignoring of their interests? There is no ground. But, none the less, we certainly

shall ignore them and shall judge restrictive policies exclusively with reference to their effects on human beings.

But that is not the end. On which human beings? If a national group is deciding whether or not to stop off trade with a foreign country, is the test to be the effect of that policy on the world as a whole or on its own citizens only? When, being very clever, we think we have found a way to tax the foreigner—to compel him against his will to make a contribution to our national resources—are we to ignore altogether the fact that what we gain he loses? And, if it is proper for the group of people living in England to frame policies without regard for their consequences abroad, why not a still narrower patriotism? Why should not the Dons of Cambridge forbid to undergraduates the purchase of London-made books, and, endowed, as a consequence of this, with well-merited wealth, pile high their College cellars with bottled sunshine from Portugal and France? I have asked a lot of questions, and I have not tried to answer them. That task is for students of Ethics, not for economists. But it is, none the less, incumbent on economists to remember that, if and when they have settled what the effect of a particular restrictive policy will be, they have not thereby settled whether

or not that policy ought to be pursued. They have furnished a part only of the data relevant to a decision. *Qua* economists, they are not qualified to furnish the rest.

Reduced then to a proper modesty, let us from our own narrow standpoint look in turn at these three sorts of restrictive action that I distinguished a little while ago. And first, restrictive action on the output of particular groups of producers. In an exchange economy, as everybody knows, it is often possible for a favourably situated group, by restricting their output, to benefit themselves. Restriction forces their prices up and so secures for the restrictionists, possibly greater gross receipts, certainly greater net receipts, than they could have got if they had accepted the price of the market and worked to that. That is the familiar story of monopoly, with its voluminous account of rings, cartels and trusts. But in the second chapter of this story, until quite recently, we always used to read that a monopolist's gain is made at other people's expense. On everything that these other people continue to buy from him they make him an extra payment. Moreover, their loss does not merely offset his gain. The net effect of monopolistic policy is not merely a transfer. For the other people lose, not only in respect of what they continue to buy at the higher price,

but also in respect of what the higher price stops them off from buying; and to this there is no set-off in gain by the monopolist. Restriction in these circumstances means, then, gain to one part of the community at the expense of a more than equivalent loss to other parts. On this ground until quite recently it has been customary for governments to frown upon combinations in restraint of trade and sometimes, as in the United States, to pass stringent laws designed to break them down. Adam Smith's aphorism still inspired the practice of States. "People of the same trade", he wrote, "seldom meet together even for merriment and diversion, but the conversation ends in a conspiracy against the public or in some contrivance to raise prices." Now the second chapter of the restrictionist's story is no longer written like this. It has been revised. Governments, all over the world, instead of frowning upon restrictionist policy, often encourage and assist it. What is the explanation of this? What is the content of the second chapter in the new version of the story?

It runs something like this. Here is an industry which in one way or another has built up a capacity much larger than it ought to have or can profitably maintain. For the special needs of war, for example, to take an extreme case, an enormous volume of resources was turned

into the making of munitions. Plainly, with the return of peace, the industry has got to be reduced to a size more appropriate to normal needs. In conditions of this kind, the argument runs, when contraction is bound to come about somehow, is it not better for everybody that it should be arranged in a deliberate and orderly way rather than be brought about as an end result of cut-throat struggles and frequent bankruptcies? The issue is not—and it is here that the old second chapter about monopolies fails in relevance—the issue is not between having a larger output and having a smaller one, but between changing from the larger output appropriate to one set of conditions to the smaller output appropriate to another set, on the one hand by a blind, chaotic and wasteful process, on the other hand by a reasoned plan. Restriction for this purpose does not benefit the restricting group at the expense of other people. Other people are not injured. On the contrary, since the distribution of the country's resources is adjusted more quickly and with less waste to what is appropriate, they, no less than the restricting group itself, are advantaged. Clearly restriction on these lines is a quite different thing from the restriction that text-book discussions about monopoly have in mind. What is there to be said about it?

First of all a distinction must be drawn. A particular industry is unduly extended when resources are engaged in that industry which could more appropriately be engaged elsewhere. I do not want to enter into a discussion about how precisely appropriateness in the distribution of resources is to be gauged. Everybody will understand in a general way that, in the face of large alterations in demand, many particular industries on occasions find themselves too big. The conditions are such that some of the labour and capital engaged in them could be employed to better advantage elsewhere—irrespective of the precise sense in which the phrase being engaged to better advantage is used. In these conditions a policy of restriction may be so contrived that it both cuts out the superfluous resources from employment in that particular industry and also secures that they are set to work elsewhere: *or* it may be so contrived that it does the first of these two things, but not the second. That distinction is fundamental. *Prima facie* the first sort of restriction saves resources from being wasted—turns them from worse uses to better; the second sort causes them to be wasted—turns them from second-grade uses to no use at all. The economic case for restriction is good or bad according as the restriction proposed works in the first way or in the second.

A very good illustration of the first kind may be found in Sir Josiah Stamp's account of what happened in the explosives industry after the War.

"Long before the end of the war", he writes, "the explosives manufacturers realised that there would be a greatly excessive output capacity, and that the contributing units were putting their products into the market under very dissimilar conditions—some having expensive modern plant and good wages in industrial areas, with economical production, others reaching equal cheapness by rural labour at remote agricultural places, with ancient methods and appliances whose capital cost had long since been amortised. It was clear that a number must go under, and it was agreed to pool the risks and costs of concentration by a straight-out amalgamation on the basis mainly of pre-war profits. The first six years of this merger saw the closing of the majority of the smaller factories and concentration and specialisation of manufacture in the best and most advantageous manner. To be more exact, 55 per cent were closed, and the majority of them finally disposed of for other purposes."[1]

But very often restriction acts quite other-

[1] *Some Economic Factors in Modern Life*, pp. 160-61.

wise than this. The surplus capital available in a particular industry leads primarily to low prices there. The restrictionist focusses attention upon that—not upon the fact of surplus capacity. The low prices are the thing to be remedied, because they are ruining the people engaged in the industry and incidentally preventing them, through lack of finance, from introducing technical improvements. Therefore the thing to do is to force prices up, either directly by rules about minimum selling price or indirectly by holding supplies off the market. That is what happens in valorisation schemes and some marketing schemes. Now note what is entailed. The producers are benefited. They secure, as with ordinary monopolies, possibly enlarged gross receipts, certainly enlarged net receipts. But, just in so far as they do this, the surplus resources held in the industry are *not* pushed out of it. The quantity of them *at work there* is cut down, but the quantity that remains *attached* there is not cut down. It may even happen, if the thing which the industry produces has a very inelastic demand, that, so far from resources being pushed out of the industry, new resources are dragged into it. For the expectation of return from belonging to the industry is enhanced by the price raising. Normally, if there were no interference with the

play of competition, low prices would gradually drive resources away from it. Restriction of the explosives industry type is in line with this process. The disease—surplus capacity—is removed, and with it the symptom, unduly low price. But restriction that concentrates on the symptom, fixes price minima or holds up supplies, so far from promoting, often hinders cure of the disease. This kind of restriction is not a civilised way of moving on resources that ought to be and, in any event, at long last will be, moved on. It is often a civilised way of retaining them there in half-employment when by rights they should move away.

Here is an imaginary illustration. Suppose there is an industry producing something the demand for which is very inelastic, with far too much plant and labour engaged in it. If the industry produces and sells all the output for which it is adapted, the price will be very low; there will be no profit; labour and capital will move away. But, if half of every year's output is deliberately burnt, good profits may be made, and, it may be, no contraction will take place. One need not be an economist to see that this entails great waste. The moral is that, in the face of surplus capacity, restriction schemes that look mainly to price and output are very likely to fail of their fundamental purpose. To be sure,

or even hopeful, of success they must, as in the explosives scheme, control, not symptoms merely, but the underlying cause.

This leads on to a more doubtful issue. It is clear enough that the ideal remedy for surplus capacity in any industry is to transfer the capital that is not wanted there to other industries where it is wanted. This would completely set right alike disease and symptom. But unfortunately it often happens that capital equipment, and, in a less degree labour, is irremovably specialised to particular industries. Some pieces of equipment, for instance, cannot be transferred to other industries in a literal sense. The best that can happen is that, as they wear out, instead of replacing them, the resources which might have replaced them will be used instead for making other sorts of equipment. This form of transfer can only be accomplished slowly. For periods too short to allow it to be accomplished our ideal remedy cannot be applied. When that is so, the choice lies, not between using the equipment surplus to our industry in that industry or in other industries, but between using it in that industry and not using it at all. Of course, from the point of view of the people engaged in the industry to let it lie idle is best. They will get a good return on their investment instead of a poor one. But—

there is no getting round the fact—this good return is a monopoly gain obtained at more than equivalent cost to other people. Productive power is being deliberately wasted, just as it is deliberately wasted when coffee or wheat is burned. In either case, if the community desires to safeguard the profits of a particular group, it is far cheaper to make them a direct grant than to let them destroy useful things. It is, I believe, illegal in this country for a man intentionally to burn down his house. Whether this is so or not, such action would be condemned by all of us as barbarous and shocking. Deliberately organised waste or destruction of consumption goods or productive instruments, for the sake of a private gain, is no less barbarous, to the economist no less shocking.

This leads me to my next point. When a particular industry is engaging an improperly large share of the community's resources, while restrictionist policies may, and indeed often do, take anti-social forms, they *need* not do this. In principle—as with the explosives industry—an economic case can be made for them. But the basis of this case is that the particular industries are engaging too large a share of resources. It follows that pleas for restriction, on the lines discussed here, cannot, in the nature of things, be generalised; for, if some industries are engag-

ing too large a share of resources, this *implies* that others are engaging too small a share. But, as I indicated earlier on, the disease, surplus capacity, plays less part in common thought than the symptom, low prices and low profits. Consequently restriction is often thought of as an appropriate *general* remedy, that might be applied with advantage, not merely to certain particular industries that are relatively over-expanded, but, in bad times, to the general body of industries that are absolutely depressed. This way you arrive at a very remarkable intellectual muddle—a curiously constructed bee that buzzes in the bonnet of no less a person than the Chancellor of the Exchequer. That potentate has very rightly and properly said that in present conditions a rise in the general level of prices is much to be desired. Why? Because by making industry more profitable it would cause it to expand and so to absorb a large number of men who are now unemployed. In what way then should the desired rise of prices be achieved? It is to be achieved by restricting production. If the experiments made in this succeed, "we shall have had"—these are the Chancellor's words—"an object lesson well worth very serious consideration in trying to think how it is possible to raise the wholesale commodity prices of the world". The suggestion is not, mark you, merely that

prices here could be advantageously raised by restricting imports to this country. It is that prices throughout the world could be advantageously raised by restricting production throughout the world. And the whole purpose of this, in the Chancellor's own account of it, is to increase the activity of industry and so employment! Cut out the middle term and what he is in effect affirming is: "If you want to expand industry, the proper means to that end is to contract it". It was Bradley, the famous Oxford philosopher, who defined metaphysics as "the finding of bad reasons for what we believe on instinct". You might not suppose it to be in character, but the Chancellor has evidently been burning midnight oil in labour at that stern science.

The second kind of restriction that I planned to discuss is restriction imposed by a government upon trading between its subjects and foreigners. These restrictions fall into two classes, those intended to tide over temporary difficulties and those of designed permanence. Under the first head, for a country on the gold standard, there would fall to be discussed one important form of would-be temporary restriction; namely, restrictions imposed in conditions of disequilibrium with the purpose of preventing foreign happenings from making the monetary situation difficult. Since this country is no longer on

the gold standard I may excuse myself from speaking about that.[1] There are a number of other forms of would-be temporary restriction, for which a good *prima facie* case can be made. Thus suppose that we are producing for ourselves those things for which we have a relative advantage and purchasing by exports those for which we have a relative disadvantage, and that everything is more or less in equilibrium. Suddenly one of the things which we have hitherto been accustomed to produce at home begins, in consequence of some purely temporary incident abroad—a currency depreciation leading, till adjustment is made, to an exchange bounty, or anything else you will—to be imported in abnormal quantities. If nothing is done, our consumers will, indeed, get the benefit of temporary cheapness; but the whole industry, for which *ex hypothesi* we are in normal conditions well suited, may be disorganised and greatly damaged. The cost of restoring it again to efficient working, after the temporary cheapness has passed, may more than outweigh the benefit of that cheapness. In such a case temporary restriction of imports may be desirable. On the same principle it may be desirable to help the start of some new industry, for which we are really well fitted, but in which we cannot,

[1] Cf. Lecture III. pp. 73-9.

till a little time has elapsed, compete with foreign firms already established. This is the familiar infant industry argument. No economist will quarrel with it or any analogous argument on *a priori* grounds. The issue is always a practical one: How likely is it that Government will choose suitable infants to protect, that it will protect them for a suitable period and, when the need for it is over, remove the protection? Everybody knows that not a few of these infants have refused to grow, that not a few have been transmuted into formidable and fierce old men of the sea!

Turn then to restrictions upon foreign trade of permanent intent. In contrasting this type of restriction with a system of freedom we need not trouble much about the total volume of resources that will find employment. Under either system from that long-run standpoint, which is proper to permanent policies, wages and prices are likely to be adjusted to one another, taking good and bad times together, in about the same degree. The two systems will differ, therefore, not in quantity, but in direction of employment, in the proportions in which labour and capital are allocated among different forms of productive activity. Under a policy of restriction, this matter, instead of being decided by the free choice of individuals, is partly decided by the

State. The issue then is whether and in what circumstances will the State secure a more desirable allocation than private enterprise would secure if left to its own devices.

First, clearly there may be reasons of a non-economic character for desiring to have some particular thing produced at home more largely than it would be if the State took no action. It may be thought on general social grounds to be a good thing to have a large part of the population on the land; or, on military grounds, to grow a large part of our food supply at home. On military grounds again it may be deemed wise for a nation to have a strong dye-making industry—as an instrument for making explosives and poison gas should war break out—or to have a strong iron and steel industry, or a strong optical glass industry. One way of securing strong home industries in these things is, of course, to block out imports. In effect the country chooses in times of peace to make for itself at some extra cost certain things that are important in war as an insurance against the risk of being short of them should war come. Obviously restrictions of this class *may* be desirable.

Moreover, quite apart from these extraneous considerations, it is easy to show that the free play of private self-interest does not always bring about the best arrangement of resources in

foreign trade any more than it does in internal trade. This implies that some restrictions of permanent intent as well as some of temporary intent, imposed on certain parts of our foreign trade, might, if properly chosen, yield us an economic gain. No serious economist doubts that. What we do doubt is whether it is these particular restrictions, of ideal magnitude and scope, that actual flesh and blood restrictionists are likely to impose. One reason for doubting this is the evident failure of not a few of these persons to understand the elements of the problem they have to solve—a failure clearly shown by the arguments that they advance in defence of what they decide to do.

Let me put to you a case, a caricature, no doubt, but not very unlike certain originals. A month or two ago a horticulturist from Lyme Regis wrote to *The Times*: "It may interest you to know that one of my banana trees has a large bunch of bananas, and that last year I had three bunches. . . . The bananas are very small—about two inches long, and do not ripen, but there are twenty or thirty of them." Where, on the logic of the Platform and the Press, could you find a stronger case for restricting imports? Bananas can be grown in England. It is true the task is difficult; but that only means that the growing of them would give employment to an

enormous number of men! The fact that English-grown bananas do not ripen might seem at first sight a disadvantage. But by no means. Though they do not ripen, they can nevertheless be eaten! As a consequence employment and income in the medical profession will expand. The spending of this income will create secondary employment. The lawyers who make the doctors' wills and the clergy who conduct their daughters' marriages will thrive, and, by spending their new gains, will make yet others thrive. Glorying in this prosperity, England will assume the name Banana-land, and Mr. Elliot will be crowned its king!

But, alas, the dream dissolves! From a long-run standpoint restriction of imports is not a means of defending native producers of certain goods against foreign producers of those goods; it is a means of defending native producers of domestic goods against native producers of export goods. It decrees that we shall obtain certain things by direct production here instead of by indirect production, instead, that is, of making something else and exchanging this with foreigners. In so far as, apart from restriction, we should choose the second way rather than the first, there is a presumption that restriction will damage us. For any particular piece of restriction, therefore, the burden of

proof is on the advocates, not on the opponents of it. In certain cases that burden may be sustained and the adverse presumption rebutted. But are those cases likely to be found and is restriction likely to be confined to them by persons who deny that any adverse presumption exists or that there is any burden of proof which they can properly be asked to shoulder?

Turn now to the last of my three types of restriction; restriction by mutual agreement among Sovereign States of the extent and character of their armaments. The fact that this sort of restriction lies outside the region of exchange makes it fundamentally different in character from the other kinds that I have discussed. If two people or groups of people are ready to engage in trade, this implies that both look to gain, and, therefore, there is a *prima facie* presumption—except when special cause is shown to the contrary—that restriction of the activities of either will damage both. But, when two people or groups stand in the relation, not of exchangers but of combatants, there is no question of mutual gain. It is impossible for one to benefit except at the cost of the other being injured. Consequently there is no presumption that restriction on the activities of either will damage both. On the contrary, the way is open for benefit to both. For the only gain that either

gets from his armaments is that they make him stronger than he would otherwise be *relatively* to the other. With armaments for both cut in half their relative position is the same, and they have both saved the cost of making the other half. The presumption here is in favour of restriction, not against it.

But apart from mutual agreement there is no tendency for restriction to come about. On the contrary, there is a cumulative tendency in the opposite sense. For, if one country increases its armaments, another can only restore the original situation by doing the same. But then the first country has lost its previous advantage. To retrieve it it takes another step: and so on cumulatively. Apart from agreement there is a perpetual urge towards increase, increase that does not end till those engaged upon it are by it destroyed. Professor Haldane in *The Causes of Evolution* speaks of the development among certain primitive animals of horned types. In the struggle within the species those with more powerful horns tended to survive. Hence gradually horns became more and more enormous. "The geological record is full of cases where the development of enormous horns and spines (sometimes in the male sex only) has been the prelude to extinction. It seems probable that in some of these cases the species literally sank

under the weight of its armaments."[1] Thus the development of instruments of combat, though it is directed to the interest of the individual members of the species, is ultimately disastrous to the whole. The struggle of particular groups of men to be stronger than one another defeats and cancels itself. Mutual agreement to restrict would benefit all collectively without individually injuring any. What each one loses in relative strength by the restriction upon him he makes good by the restrictions on others. They are all then no less secure than before, and they are all spared a heavy drain on their resources.

But this economic consideration is not, of course, the main thing. Mutual agreement to restrict armaments, if and in so far as it can be carried through, offers some safeguard against what is, beyond doubt, the greatest of all public evils—war between modern States. It is not only the wounds and death of many who go to fight that makes of that so monstrous a thing. There is too, along with this, in one sense even worse than this, the degradation of thought and feeling of many who remain in physical safety at home. Here is one tiny illustration. At a not very late stage of the Great War I argued in print that the Allies ought to state publicly their terms of

[1] *The Causes of Evolution*, p. 126.

peace and that these terms should be moderate; a disputable thesis perhaps, but, with the lives and happiness of millions at stake, surely not a criminal one. But for arguing this I was the recipient of many tokens of affection and esteem, among them some illuminating anonymous postcards. Here is one—brief and to the point—"May you rot for ever in the lowest cesspools of Hell!" Not Dante himself devised for his enemies a punishment less enticing! The war had endowed this gentleman—or, as I like to suppose, this lady—with a poet's imagination; but had it, do you think, improved the quality of her soul? Here is another memory. Immediately before the Armistice, when the hope of an ending to that long nightmare at last had dawned, there appeared in a London newspaper three letters from three old men. Their joint age must have been some 250 years. This was their theme. There must be no armistice. Till the German armies surrendered without conditions they—they, if you please—those gallant lads!—they would never sheathe the sword! A comedy, yes! But a tragedy too! When the substance was already gained, thousands more to die for the shadow—for a phrase! Is it not a tragedy of the spirit that men, secure from danger themselves, should urge the world to this and feel no shame? If only my French accent were

tolerable, I would read to you, as it is written, a passage from Anatole France. It loses much rendered into English, but this is somewhat how it runs. Then Doctor Obnubille took his head between his hands and thought bitterly: "Since wealth and civilisation carry with them as many causes of war as poverty and barbarism, since the folly and wickedness of men are incurable, there remains one good deed to do. The wise man will collect enough dynamite to destroy this planet. When it rolls in fragments through space an imperceptible improvement will have been made in the Universe, and some satisfaction will be given to the universal conscience, which after all does not exist—*qui d'ailleurs n'existe pas.*" Well, restriction of armaments by mutual agreement is perhaps an alternative to that.

THE END

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